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**THE IMPACT OF WORK EXPERIENCE ON
SUBSEQUENT CAREER OUTCOMES OF
NEW ZEALAND UNIVERSITY GRADUATES**

A thesis

submitted in partial fulfilment

of the requirements for the degree

of

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ABSTRACT

The principal objective of this study was to ascertain whether career outcome differences exist between recent university graduates who have had differing types of work experience while completing their studies. Specifically, comparisons were made between graduates who had no work experience at all while studying (the '*None*' group), those who had work experience unrelated to their degree (the '*Unrelated*' group) and those who gained work experience that was related to what they were studying at university (the '*Related*' group).

Participants were drawn from alumni organisations and various websites including social media. Participants completed an online questionnaire which measured five distinct constructs: job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and person organisation fit. Participants were also asked to report on their university and employment history, their current employment and their demographics. The final sample consisted of 130 participants, an overall response rate of 48.5%. Following a factor analysis, a series of one way ANOVA's were conducted on the three groups and the above variables.

The most notable finding was that graduates who had related work experience were more likely to have both applied for fewer jobs and started on a higher salary after entering the employment market than those who had no work experience at all. These graduates also felt significantly more prepared for employment, felt that their current employment was appropriate to their level of education and were more likely to report that the work experience they gained while studying was an important factor in successfully acquiring their first job as well as being useful in finding a 'satisfying job'. These graduates were more

likely to be employed full time and have a job requiring a qualification or some form of formal training than both those graduates who had unrelated work experience or no work experience. Finally, the results indicate that graduates who felt their current employment was appropriate to their level of education, regardless of the type of work experience they gained, were more likely to have higher scores on the five constructs.

The results presented in this study revealed a number of significant differences between the three groups, thereby supporting the research rationale, and indicating that working while completing a university degree does have certain benefits for recent university graduates. This study has provided new evidence in an area lacking in research and becoming increasingly important as rising numbers of young people in New Zealand are achieving qualifications at universities. Students who did not work while at university had fewer opportunities available to them when entering the labour market. Therefore, the practical implications for future university graduates are far reaching as students can see, post graduation, the benefits for combining work and study.

Longitudinal research into the relationship between student work experience and graduate career outcomes is recommended in order to examine the continued influence that work experience could have on areas such as wage raises and career progression. Investigation into employer's thoughts and perceptions of university graduates with no, unrelated or related work experiences would be valuable to gauge exactly what employers look for when hiring university graduates, how they rate students who have no work experience in comparison to those who do and the extent that these differing work experiences could impact a job applicant's employment possibilities.

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"The more that you read, the more things you will know. The more that you learn, the more places you'll go."

— Dr. Seuss

"Recipe for success: Study while others are sleeping, work while others are loafing, prepare while others are playing, and dream while others are wishing."

— William A. Ward

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Chapter One – Introduction

In New Zealand the number of domestic students enrolled at university has increased significantly from 115,860 in 2000 to 154,866 in 2009, resulting in more than half of all New Zealanders aged 15 to 29 holding a Bachelors degree or higher (Ministry of Education, 2010). However, as the number of domestic enrolments have increased, so too have tertiary education fees. Obtaining a tertiary education in the 1940s and 1950s was free for individuals as the government paid for the cost of the students' education (The Treasury, 2012). Until 1989 fees for domestic students in New Zealand were very low, the fee for a full-time, full year program of study at a university was less than \$300 (New Zealand University Students' Association (NZUSA), 2011). In 1990, the Labour government introduced a flat \$1250 standard tertiary fee for a full-time, full year program of study. This was subsequently abolished by the National government in the 1991 budget and replaced with an open market model where tertiary institutions were able to set their own fee levels without any government regulation (NZUSA, 2011). Additionally, the rate of government funding per student decreased, resulting in tertiary institutions passing this cost on to students by increasing fees an average of 13% per year throughout the 1990's to recover the money lost through government funding cuts. As of 2010, the average tuition fee for a full-time, full year program of study is \$6,246 (Education Statistics of New Zealand, 2010; NZUSA, 2011), this equates to the government only paying for approximately 30 percent of domestic students' education.

Despite the rate of government funding per student decreasing throughout the 1990's, the actual amount the government spends on tertiary education has increased significantly from \$3.33 million in 2001 to \$5.3 million in 2010

(Ministry of Education, 2011). This actual increase can largely be attributed to the shift to a knowledge economy and can be seen as a ripple effect from the recession as the number of students attending university in the early twenty-first century has meant more money is required from the government to help subsidize an increasing number of students wanting to gain a university qualification. The increase in university fees has resulted in two main outcomes for students.

Firstly, more than three quarters of students (77%) now rely on a student loan to pay for tuition fees, with an average student loan debt of \$15,558 (Education Statistics of New Zealand, 2010; NZUSA, 2011). Similarly, the Graduate Longitudinal Study of New Zealand (2012) (hereafter referred to as the GLSNZ), found that four out of five students from the 2010 graduating student cohort had taken out a student loan and that the median loan was \$15,001 to \$20,000 (Tustin, Chee, Taylor, Gollop, Taumoepeau, Hunter, Harold, & Poulton, 2012). Secondly, there is an increasing need for many full time students to obtain paid part-time employment to help pay for basic living and study costs such as university fees, rent, power and food (Curtis & Williams, 2002; Gault, Redington & Schlager, 2000; Hakkinen, 2004; Richardson, Evans & Gbadamosi, 2009).

As globalization connects countries in ways they have never been connected before, there is growing worldwide competition for graduates, resulting in the ever increasing need for students to differentiate themselves or engage in activities that will give them a competitive edge when applying for jobs. Studies have shown that one way of doing this is to enter into paid part-time employment where transferrable skills such as time management, communication, team working, organisational and interpersonal skills can be learnt and as a result, potentially make a good impression on prospective employers (Blasko, et al.,

2002; Curtis, 2007; Gault, et al., 2000; Larsen & McGuigan, 2010; Loizou, 2000; Watts & Pickering, 2000).

Undertaking paid part-time employment while studying full time is becoming increasingly common for students enrolled in a formal university program. The number varies depending on which study is read, however, the percentage of students combining both of these roles is substantial (Broadbridge & Swanson, 2006). One United Kingdom study revealed that more than four out of five graduates had work experience during higher education (Blasko, Little & Woodley, 2002). Similarly, Hakkinen (2004) revealed that half of all Finnish students work while enrolled in a university. In a New Zealand study, Manthei and Gilmore (2005) found that 81 percent of the students surveyed held at least one job during term time for an average of 14 hours per week and the GLSNZ (2012) found that 60 percent of students were employed either full time or part-time while studying (Tustin, et al., 2012).

Multiple international studies have been published in psychology, human resources, labour economics, education and training and career development that explore both the positive and negative effects of combining paid part-time employment with study. In particular, these studies identified the impact that combining these two roles can have on university aspects such as academic grades and lecture attendance (Curtis, 2007; Curtis & Williams, 2002; Ehrenberg & Sherman, 1987; Hakkinen, 2004; Holton, 2001; Iddekinge, Putka, & Campbell, 2010; Inkson & Myers, 2003; Light, 2001; Manthei & Gilmore, 2005; Mihail & Karaliopoulou, 2005 and Watts & Pickering, 2000). Educational professionals have become increasingly apprehensive about the number of students employed part-time and especially the number of hours they work per week (Hodgson &

Spours, 2001). These apprehensions have led to fears that combining the two roles has a conflicting and negative effect, rather than a positive effect, suggesting that term-time employment leads to poorer adjustment to university life in terms of academic performance, social inclusion and psychological well-being (Broadbridge & Swanson, 2005).

Most of the research conducted in this area has therefore focused on the negative outcomes of combining the two roles. Such negative effects include the difficulty and inability to manage workloads, having less time for academic study, feeling overloaded, rushed assignments, tiredness, stress, lower grades than students not working, missing lectures, time-tabled sessions and deadline dates as well as working long, unsociable hours for low pay (Broadbridge & Swanson, 2006; Curtis, 2007; Curtis & Shani, 2002; Curtis & Williams, 2002; Hunt, Lincoln & Walker, 2004; Leonard, 1995; Manthei & Gilmore, 2005). Additionally, there have been reports that working during term time can have a large negative impact on extra-curricular activities and leisure time, such as sporting, musical, voluntary and social activities (Manthei & Gilmore, 2005).

There have also been numerous studies that focus on the various career experiences of recent university graduates once they have entered the labour market. However, of the many studies that were reviewed, only a small number of studies (Blasko, et al., 2002, Tustin, et al., 2012) focussed specifically on the impact of engaging in paid part-time employment while studying as well as the impacts, either positive or negative, on those students' future career outcomes. Some studies have found positive outcomes of combining part-time employment with full time study. Such positive effects include assisting graduates in getting their first job after graduation and facilitating the transition from full-time

education to full-time employment (Blasko, et al., 2002; Broadbridge & Swanson, 2006; Manthei & Gilmore, 2005). These positive effects can have an impact on the graduate's employment options post graduation due to learning valuable information such as how to manage one's time effectively, learning how to multi-task, being responsible, punctual and learning how to interact with people in the workplace, especially co-workers, supervisors and customers. Further positive effects include enhanced self-esteem, confidence and social skills as well as higher earnings post graduation, greater overall job satisfaction, knowledge or skills that are academically relevant, organisational skills, and transferable skills such as communication, team working and interpersonal skills (Blake & Worsdale, 2009; Blasko, et al., 2002; Broadbridge & Swanson, 2006; Curtis, 2007; Gault, et al., 2000; Hakkinen, 2004; Larsen & McGuigan, 2010; Loizou, 2000; Manthei & Gilmore, 2005, Neill, Mulholland, Ross & Leckey 2006; Watts & Pickering, 2000). The present research contributes to the small number of studies previously conducted in this area.

The rationale motivating this research stems from the situation many Westernized countries have with the shift from a service to a knowledge economy. Powell and Snellman (2004) defined a knowledge economy as one where production and services are based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance. Compounding this, the recent world wide economic recession has led to an increase in youth unemployment rates in New Zealand, in 2008 the unemployment rate for 15-24 year olds was 10.8% (Statistics New Zealand, 2008) however, by 2012 it had increased to 17.1% (Statistics New Zealand, 2012). The high unemployment rate has had a ripple effect on university enrolments, as

school-leavers and other young individuals have struggled to find employment, with many choosing to stay at school longer and go to university to get a degree instead of doing an apprenticeship or trying to find work. The shift to a knowledge economy, where there is greater reliance on intellectual capabilities than on physical inputs or natural resources (Powell & Snellman, 2004), has resulted in school-leavers and university graduates in New Zealand entering a labour market that demands greater literacy, language, numeracy and qualification levels than ever before (Ministry of Business, Innovation & Employment, 2010).

Research Purpose

The aim of the present research was to construct and analyse a theoretical model (see Figure 1, page 15) of the impact of concurrent work experience on subsequent career outcomes and experiences for recent university graduates within New Zealand. Specifically, the study aimed to compare participants who had differing types and levels of work experience while studying, on variables such as job satisfaction and starting salary that would potentially be influenced by the type of work experience the individual gained. This study examined both the potential advantages and disadvantages for recent university graduates and aimed to highlight for current and future working and non-working students, the possible short and longer term advantages of combining full time study with paid, part-time employment.

The original aim of the research was to look at the following five groups of graduates; the '*None*' group which consisted of participants who did not gain any work experience at all while completing their tertiary education, the '*Low Unrelated*' group which encompassed participants who worked between one and

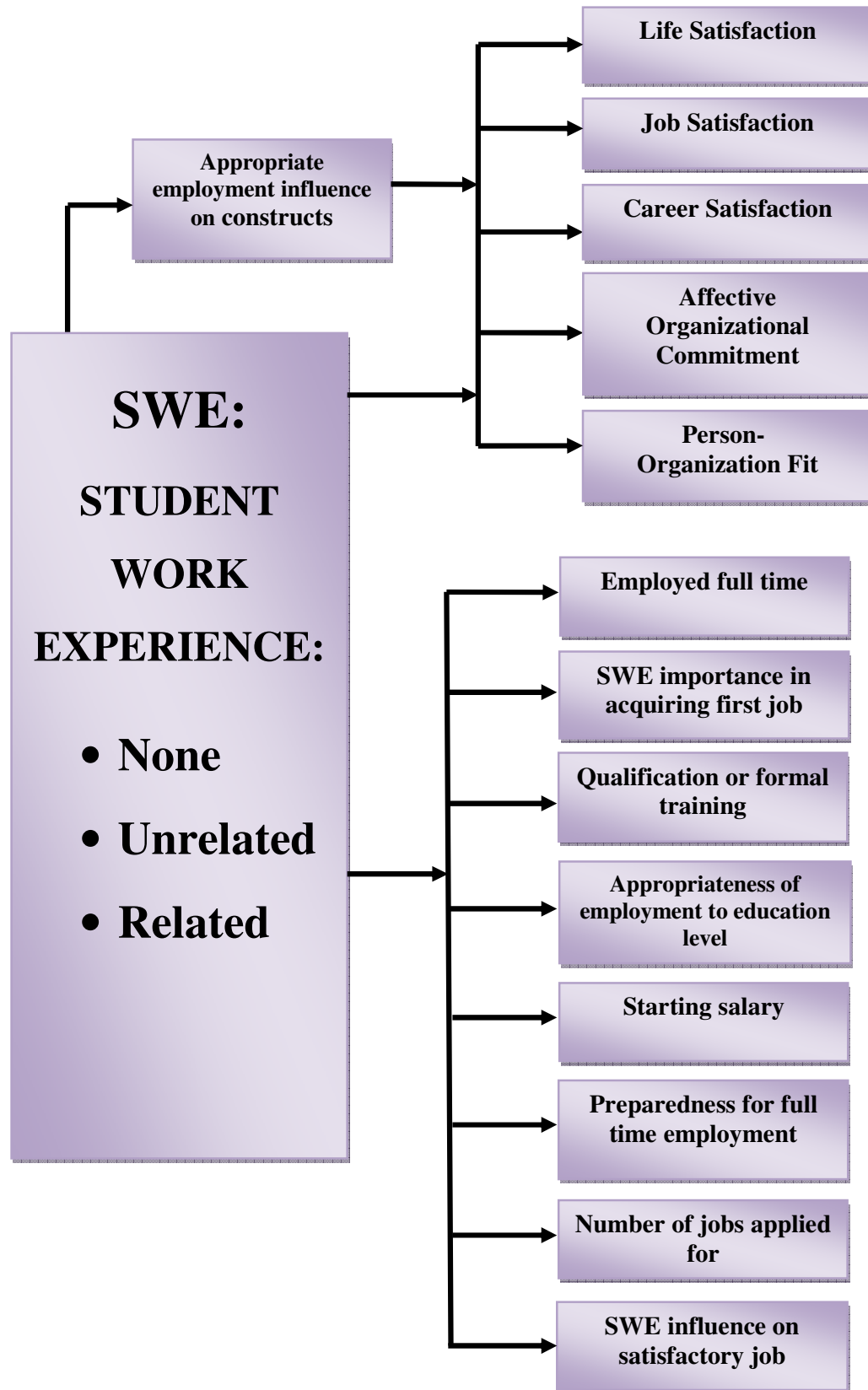


Figure 1. Theoretical model of student work experience. The model demonstrates the way in which the five constructs and the nine career outcome variables will be influenced by the type of work experience the individual gained, none, unrelated or related to the student's degree.

ten hours per week and whose work experience was no more than 40% related to study. The third group, the '*High Unrelated*' group was made up of participants who worked eleven or more hours per week and whose work experience was no more than 40% related to study. The '*Low Related*' group consisted of participants who worked between one and ten hours per week and whose work experience was 41% or more related to study, any internship or placement the graduate completed while studying was included as related work experience. Finally, the '*High Related*' group was made up of participants who worked eleven or more hours per week and whose work experience was 41% or more related to study, any internship or placement the graduate completed while studying was included as related work experience.

However, due to very small sample sizes in the '*Low Unrelated*' group (7 participants) and the '*Low Related*' group (6 participants) the groups were combined to form three groups, the '*None*' group (graduates with no work experience), the '*Unrelated*' group (graduates with work experience unrelated to their degree) and the '*Related*' group (graduates with work experience related to their degree). Subsequently, the hypotheses that were originally developed for this study predicting the relationships to be found between the five groups ('*None*', '*Low Unrelated*', '*High Unrelated*', '*Low Related*' and '*High Related*'), the five constructs and the nine career outcome variables (to be discussed further later in the chapter) were reformulated around the three new groups.

Therefore, this research looked at the following three groups of graduates which will be further defined and discussed below:

- a) Students who did not work at all while completing tertiary education,
- b) Students who gained work experience *unrelated* to their study,

- c) Students who had gained work experience *related* to their study.

Student Work Experience

Due to the nature of the study there were four main criteria that individuals had to meet before they could be eligible to participate in this study. A broad overview of these criteria is presented below and further details will be discussed in the Method chapter (Chapter 2).

The study was open to individuals who:

- a) Were high school-leavers. Participants had to be individuals who went to university directly after high school, without taking time out from education to work or travel. This exclusion criterion was necessary to ensure that the work experience that is measured is the work experience the individual gained while being enrolled at a university.
- b) Were full time students. Participants had to have been enrolled in a full time, formal university qualification before graduating and entering the workforce. It was important for the present study to only include full time students as including part-time students would potentially affect any differences found between the '*None*', '*Unrelated*' and '*Related*' groups.
- c) Graduated no more than five years ago from their undergraduate or graduate degree. This criterion was necessary to ensure that the study compares participants who have graduated within a similar time frame and who were on an equivalent level as far as education is concerned.
- d) Completed their degree(s) without taking any time out from university education to work or travel. This criterion was essential to ensure

participants were all being compared on a similar bench mark with regards to their work experience before graduation.

Group Classification

This study grouped participants into three different groups depending on the type of work experience they gained while at university. The groups were categorised by the extent that the graduate's work experience while studying was related to their chosen field of study or degree. The level of relatedness, either 'related' or 'unrelated' was used to define the groups as Blasko, et al., (2002) found that work experience related to field of study had a particularly positive impact on employment outcomes for recent graduates. Therefore, it was deemed to be important to group those individuals who had work experience related to their qualification together and those who had work experience unrelated to their qualification together. The three groups are as follows;

- **The 'None' group:** This group consisted of participants who did not gain any work experience at all while completing their tertiary education.
- **The 'Unrelated' group:** This group was comprised of participants who gained work experience while attending university that was unrelated to their chosen field of study. The work experience gained had to be no more than 40% related to the individual's field of study for participants to be included in the '*Unrelated*' group.
- **The 'Related' group:** This group encompassed participants who gained work experience while attending university that was related to their chosen field of study. The work experience gained had to be 41% or more related

to the individual's field of study and subsequently included any internship or placement the graduate completed while studying.

The 'unrelated' and 'related' brackets were purposefully split at the 40 percent mark to force participants to decide whether the majority of their work experience was unrelated or related to their chosen degree(s), this was to avoid participants just selecting 50 percent as a default option. The above classifications were necessary to create the study's three groups and subsequently enable the groups to be compared on the various employment related variables and outcomes.

Criterion Variables

Job Satisfaction

Job satisfaction refers to an individual's feelings or state-of-mind regarding the nature of their work. Job satisfaction can be influenced by a variety of factors, such as the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, and the degree of fulfilment in their work (Paton, Jackson & Johnston, 2003). Cranny, Smith, and Stone (1992) stated that job satisfaction is defined as an employee's affective reactions to a job based on comparing actual outcomes with desired outcomes. Job satisfaction is generally recognised as a multifaceted construct that includes an employee's feelings about a variety of both intrinsic and extrinsic job elements (Fields, 2002). Porter and Steers (1973) argued that an individual employee's job satisfaction is reflected in the number of separate expectations that are met for each employee. When the number of unmet expectations exceeds a hypothetical

threshold, the individual would subsequently experience less or a lower level of job satisfaction.

Job satisfaction has been included in the current study as a measure of how satisfied the individual is with their present job. Job satisfaction is an important career outcome variable as it is one of the easiest ways to measure how happy a recent university graduate is with his/her first job after graduating from university. Job satisfaction has subsequently been included in the present study because of the aim of determining the impact that student work experiences have on the level of job satisfaction the individual enjoys post graduation. This leads to the following prediction:

Hypothesis 1: *There will be a significant difference between the three groups on job satisfaction. The 'Related' group will show the highest job satisfaction followed by the 'Unrelated' group and the 'None' group will show the lowest job satisfaction.*

The study's groups have been ordered due to the assumption that graduates with work experience related to their field of study would be able to find a higher level job, a job more suited to their qualifications which would subsequently influence the individual's feelings of satisfaction with his/her job. Individuals who only had work experience unrelated to their degree would presumably find it harder to find a higher level job and those with no work experience at all would potentially find it significantly harder to find a job which meets their expectations.

Career Satisfaction

Joo and Park (2010) defined career satisfaction as the level of overall happiness that is experienced through one's choice of occupations. Similarly, Judge, Cable, Boudreau and Bretz (1995) stated that career satisfaction is commonly assessed as subjective career success that is subsequently defined by the individual's satisfaction with their career accomplishments. Career satisfaction is the result of positive psychological or work-related outcomes or achievements that an individual has accumulated as a result of their work experiences (Judge, et al., 1995). Career satisfaction, or success as it is often referred to in the literature, is a very subjective concept, as success in one's career is defined by each individual. When an individual's career success is judged by an outside perspective it is often judged on objective, visible criteria such as salary and number of promotions (Judge, et al., 1995). Objective career success can therefore be defined as observable career accomplishments which can be measured against the metrics of pay and ascendancy (London & Stumpf, 1983). Conversely, career success can be judged by the individual pursuing the career by using subjective measures such as individual performance appraisals measured by the individual's own opinion of his/her level of career success (Judge, et al., 1995). The present research aimed to measure both objective and subjective dimensions by measuring participant's starting and current salary and by asking participants questions such as "I am satisfied with the success I have achieved in my career".

Career satisfaction has been included in the current study as a measure of how satisfied the individual is with his/her current career progression post graduation. The participants in the present study were all educated recent

university graduates, who all potentially have high career aspirations, resulting in career satisfaction being an important career outcome variable to include into the present study. Establishing the impact that student work experiences have on future career satisfaction has been assessed using the following prediction:

Hypothesis 2: *There will be a significant difference between the three groups on career satisfaction. The 'Related' group will show the highest career satisfaction followed by the 'Unrelated' group and the 'None' group will show the lowest career satisfaction.*

The study's groups have been ordered due to the assumption that graduates with work experience related to their field of study would be able to find a job more suited to their qualifications. This would presumably lead to a faster career progression and subsequently influence the individual's feelings of satisfaction with his/her career. Extending this assumption, individuals who only had work experience unrelated to their degree would presumably find it harder to find a job in the aforementioned category, which in turn would influence their career progression and consequently satisfaction. Those graduates with no work experience at all would hypothetically find it significantly harder to obtain the same type of career progression and satisfaction.

Life Satisfaction

Life satisfaction is a measure of how satisfied one is with one's life circumstances, particularly in regard to the fulfilment of one's needs and expectations, and is considered to be an indicator of overall happiness or emotional well-being (Spector, 2008). Rode, Arthaud-Day, Mooney, Near, Baldwin, Bommer, and Rubin (2005) defined life satisfaction as representing an

overall attitude that is composed of components of satisfaction in various domains of life. The importance of any one specific life domain to overall life satisfaction is therefore, dependent on each individual's view of his/her life satisfaction. Life satisfaction is a broad variable that takes into account the myriad of pressures across life domains, that may or may not influence individual performance (Rode, et al., 2005).

The spillover hypothesis suggests that satisfaction, or dissatisfaction, in one area of an individual's life affects, or spills over into another area of life (Spector, 2008). Therefore, problems or dissatisfaction in an individual's home life can affect satisfaction with work and vice versa which can in turn affect satisfaction with one's life situation. However, for the purposes of this research, life satisfaction was considered overall, or as a whole, rather than delving into specific domains of life satisfaction. This was done by using subjective, self report measures where participants were asked to answer questions such as "I am satisfied with my life".

Life satisfaction has been included into the current study as a measure of how satisfied the individual is with their life circumstances overall after graduating from university. Life satisfaction, like job satisfaction, is an important career outcome variable as it is one of the easiest ways to take a snap shot of how happy the participants are with their life in general. The present study examined life satisfaction to discover the potential impact that student work experiences have on an individual's overall level of life satisfaction after graduation. This aim leads to the subsequent prediction:

Hypothesis 3: *There will be a significant difference between the three groups on life satisfaction. The ‘Related’ group will show the highest life satisfaction followed by the ‘Unrelated’ group and the ‘None’ group will show the lowest life satisfaction.*

The study’s groups have been ordered due to the assumption that graduates with work experience related to their field of study would be able to find a job more suited to their qualification(s), this in turn would presumably influence the individual’s life satisfaction. Following this, individuals who only had work experience unrelated to their degree would potentially find it harder to find a job in the aforementioned category, influencing their overall life satisfaction. Finally, those graduates with no work experience at all would theoretically find it significantly harder to obtain the same level of life satisfaction.

Affective Organisational Commitment

Organisational commitment has been operationally defined as involving an employee’s loyalty to the organisation, willingness to exert effort on behalf of the organisation, degree of goal and value congruency with the organisation, and desire to maintain membership (McShane & Travaglione, 2007; Meyer & Allen, 1997; Paton, et al., 2003).

Affective commitment is a dimension of organisational commitment, defined as the emotional attachment, identification, and involvement that an employee has with his/her organisation and goals (Meyer & Allen, 1997; Paton, et al., 2003). Therefore, an employee feels affective commitment towards an organisation when s/he has an emotional attachment to it and wants to stay rather

than feeling as though s/he ought to stay out of a sense of duty to the organisation (normative commitment) or because of the need to stay due to a high salary or comprehensive benefits the organisation offers (continuance commitment). The present research study focused specifically on affective commitment.

Affective organisational commitment has been included into the current study as a measure of how emotionally attached and committed the individual is to his/her job after graduating from university. Affective organisational commitment essentially looks at the degree that an individual likes the company s/he works for. It is an important career outcome variable for recent university graduates as not all graduates are fortunate enough to secure a job in their qualification field immediately after graduating. This variable will potentially aid in discovering the extent that an individual's work experience while studying affected their current affective organisational commitment levels and leads to the following prediction:

Hypothesis 4: *There will be a significant difference between the three groups on affective organisational commitment. The 'Related' group will show the highest affective organisational commitment followed by the 'Unrelated' group and the 'None' group will show the lowest affective organisational commitment*

The study's groups have been ordered due to the assumption that graduates with work experience related to their field of study would be more familiar with the type of organisation they would want to work for and would subsequently have a wider range of organisations to choose from, due to their previous work experience. This in turn would presumably influence the

individual's affective organisational commitment levels. Extending this assumption, graduates with only unrelated work experience would potentially find it harder to find a job, impacting their ability to choose to work for a particular organisation, influencing their overall affective organisational commitment. Following this, graduates with no work experience at all would theoretically find it significantly harder to obtain a job at their desired organisation, impacting on their affective organisational commitment levels.

Person Organisation Fit

Person organisation fit is based on the perspective that aspects of both an individual employee and a job situation combine to influence the individual's response to work (O'Reilly, Chatman & Caldwell, 1991). That is, attitudes, behaviours, and other individual-level outcomes result not from the person or environment separately, but rather from the relationship between the two. Person organisation fit refers to the degree of congruence or compatibility between the individual and the attributes of the organisation concerned. For individuals, these attributes may include personality traits, beliefs, values, and interests. For the organisation, these characteristics traditionally include the culture, climate, values, goals, and norms (Chan, 1996). Congruence may occur when a person supplements or matches with other individuals in an environment, when a person's characteristics add something to the environment that was missing, when an organisation satisfies individual needs, and/or when an individual has the abilities required to meet organisational demands (Fields, 2002).

Person organisation fit has been included into the current study as a measure of how well the individual and the organisation gel or fit together, based on the individual's own beliefs and values compared to the organisation's culture

and goals. Person organisation fit is an important career outcome variable as it is a straightforward way of assessing whether the individual is working for the right company or whether s/he is in a job suited to him/her. This is a particularly important career outcome measure for recent university graduates as due to the difficulties in acquiring a job post graduation, graduates may feel the need to take the first job they are offered, regardless of whether they feel they are suited to that job or organisation. Person organisation fit has subsequently been included in the present study to determine whether early work experiences influence an individual's person organisation fit levels post graduation. This aim leads to the following prediction:

Hypothesis 5: *There will be a significant difference between the three groups on person organisation fit. The 'Related' group will show the highest person organisation fit followed by the 'Unrelated' group and the 'None' group will show the lowest person organisation fit.*

The study's groups have been ordered based on the same assumption as argued earlier, that graduates with work experience related to their field of study would be more familiar with the type of organisation they would want to work for and would have a wider range of organisations to choose to work for, due to their previous work experience. This in turn would presumably influence the level of 'fit' between the individual and the organisation. Graduates who only had work experience unrelated to their degree are potentially more likely to find it harder to find a job, impacting their ability to choose who they would prefer to work for and in turn, influencing their person-organisation fit. Finally, graduates with no work

experience at all would hypothetically find it significantly harder to obtain the same level of person-organisation fit.

Number of Jobs Applied for

Blasko, et al., (2002) found that three and a half years after graduation, 88% of graduates were in paid work, a further 7% were pursuing professional training or further academic study, 3% were unemployed and seeing work and the remaining 2% were looking after family or otherwise not economically active. Additionally, graduates who had gained a lot of work experience while studying, either related to their degree or not, were the most likely to be employed whereas graduates with no work experience while studying were the least likely to be employed (Blasko, et al., 2002).

Jobs applied for has been included in the current study as a measure of the impact that part-time work experience may have on a graduate's ability to primarily get a job out of university, but more importantly, their ability to be able to secure a job within their qualification field. This leads to the following prediction:

Hypothesis 6: There will be a significant difference between the three groups on the number of jobs participants applied for. Graduates in the 'Related' group are more likely to have applied for fewer jobs, than graduates in the 'Unrelated' group, followed by graduates in the 'None' group.

The present study's three groups have been ordered in the above way based on the assumption that graduates with work experience related to their field of study would find it significantly easier to find a job after graduating and would

subsequently have applied for fewer jobs before securing one. Individuals who had only unrelated work experience would presumably find it harder to find a job in their field of study resulting in them applying for more jobs before acquiring one. Following this, those with no work experience at all would potentially find it significantly harder to find a job than those in the 'Unrelated' and 'Related' groups.

Starting Salary

Starting salary was incorporated into the present study as a measure of the impact that a recent graduate's type of work experience may have on their first wage. According to Blasko, et al., (2002) work experience can help graduates in finding a better job. Employers often cite a preference for university graduates with some form of concurrent experience in the labour market and this preference can show itself in the form of financial or other premium (Blasko, et al., 2002). Individuals who gained related work experience while studying were found to have a starting salary that was on average, 20% more than those with no work experience after three and a half years of full time employment (Blasko, et al., 2002). Subsequently this lead to the following prediction:

Hypothesis 7: *There will be a significant difference between the three groups on the participants starting salary. Graduates in the 'Related' group are more likely to have started on a higher salary than those in the 'Unrelated' group, followed by graduates in the 'None' group.*

Graduates in the 'Related' group are hypothesised to have started on a higher salary than those in the 'Unrelated' and 'None' groups due to the assumption that graduates with related work experience will secure a job within

their field of study and be paid accordingly for their combined knowledge, skills and abilities. Graduates with unrelated work experience would potentially find it harder to secure a job within their field of study and would subsequently be more likely to take a job outside this area which is likely to offer a lower starting salary than a more qualified position. Extending this assumption, graduates with no work experience at all would potentially find it significantly harder to find a job let alone a job within their field of study, theoretically resulting in these individual's starting on the lowest salary due to their lack of previous work experience.

Work Experience Influence on Satisfactory Job

Blasko, et al., (2002) found that well over half of the graduates that they surveyed thought that their combined degree and work experience had helped them considerably in finding and securing a satisfying job after graduation. Furthermore, those who had done some work experience related to their degree were much more likely to report this than those with no or only unrelated work experience (Blasko, et al., 2002). Whether or not the participants' work experience was useful in helping them find a 'satisfying job' post graduation was utilised in the current study as a measure of the importance of student work experience on an individual's ability to potentially find a job within his/her qualification field.

Hypothesis 8: *There will be a significant difference between the three groups on the reported usefulness of acquired work experience in facilitating individuals to find a satisfying job after graduation. Graduates in the 'Related' group are more likely to have found the work experience*

they gained while at university useful in securing a satisfying job post graduation than those in the 'Unrelated' group.

The '*None*' group, having no work experience to use have been omitted from this hypothesis as individuals in this group would potentially find their lack of work experience a hindrance in finding a satisfying job post graduation. The present study's groups have been ordered in the above way based on the assumption that graduates with work experience related to their field of study would find their work experience more useful in facilitating the search for a satisfying job post graduation. Individuals in the '*Unrelated*' group would presumably find their work experience significantly less useful in helping them find a satisfying job within their field of study.

Preparedness for Full-time Employment

According to Blasko, et al., (2002) any form of work experience may help students develop certain attributes and skills which might be useful later in employment situations. Whether or not the participant's work experience was useful in preparing them for full-time employment post graduation was included in the present study as a measure of the potentially transferrable skills such as time management and workplace behaviour that an individual would potentially learn from working while studying. Previous studies have identified that individuals who have acquired work experiences that were related in some way to the student's programme of study were more prepared for employment post graduation than students with no or unrelated work experience (Blasko, et al., 2002). These work experiences are more likely to provide graduates with useful contacts in terms of what routes into the labour market to explore and helping

them to get the crucial first step on the career ladder (Blasko, et al., 2002). This lead to the following estimation:

Hypothesis 9: *Graduates in the ‘Related’ group are more likely to feel that the work experience they gained while at university was useful in preparing them for full-time employment post graduation than those in the ‘Unrelated’ group.*

The ‘None’ group, having no work experience to use have been omitted from this hypothesis as individuals in this group would presumably find their lack of work experience a hindrance in feeling prepared for any form of full-time employment due to their lack of work experience. The present study’s groups have been ordered in the above way based on the assumption that graduates with related work experience would feel significantly more prepared for full-time work within their field of study, due to their previous work experiences. Graduates in the ‘Unrelated’ group would by extension theoretically feel less prepared for full time work in their qualification field, due to their lack of relevant work experience.

Appropriateness of employment to education level

Blasko, et al., (2002) found that 40% of graduates with no or only unrelated work experience felt that their existing employment was not appropriate to their education level. This figure fell to 30% for their ‘low related’ group and to 20% for graduates with a large amount of related work experience (Blasko, et al., 2002). Employment appropriate to education has been incorporated into the current study as a measure of the influence that part-time work experience may

have on a graduate's ability to secure a higher level job, or more importantly, a job within their qualification field. Thus the subsequent prediction follows:

Hypothesis 10: *Graduates in the 'Related' group are more likely to feel that their current employment is appropriate to their level of education than those in the 'Unrelated' group, followed by graduates in the 'None' group.*

The present study's three groups have been ranked in the above way based on the assumption that graduates in the 'Related' group would be significantly more likely to report securing a job that they felt was appropriate to their level of education. This would presumably be due to their related work experience enabling them to find a job within their field of study. Unrelated work experience would theoretically have less of an impact on securing a job within the individual's field of study, subsequently resulting in these individuals feeling that their employment is less appropriate to their level of education than those with related work experience. Graduates in the 'None' group are hypothesised to be significantly less likely to report feeling that their employment is appropriate to their level of education than those in the 'Related' or 'Unrelated' groups. This is likely to be due to their lack of work experience which would presumably challenge an individual's ability to secure a job upon entering the employment market.

Appropriate Employment Influence on Constructs

When graduates feel that their employment is appropriate to their level of education they will potentially have higher levels of job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and person

organisation fit. This variable has been included into the present study as a measure of the potential advantages, such as higher levels of satisfaction, commitment and fit, that could benefit an individual who has secured a job appropriate to his/her education level.

Hypothesis 11a: *Graduates who feel that their current employment is appropriate to their level of education are more likely to report higher job satisfaction, regardless of the type of work experience they acquired while attending university.*

Hypothesis 11b: *Graduates who feel that their current employment is appropriate to their level of education are more likely to report higher career satisfaction, regardless of the type of work experience they acquired while attending university.*

Hypothesis 11c: *Graduates who feel that their current employment is appropriate to their level of education are more likely to report higher life satisfaction, regardless of the type of work experience they acquired while attending university.*

Hypothesis 11d: *Graduates who feel that their current employment is appropriate to their level of education are more likely to report higher affective organisational commitment, regardless of the type of work experience they acquired while attending university.*

Hypothesis 11e: *Graduates who feel that their current employment is appropriate to their level of education are more likely to report higher person organisation fit, regardless of the type of work experience they acquired while attending university.*

Graduates who feel that their current employment is appropriate to their level of education, regardless of which one of the study's three groups they fall in to, are hypothesised to report higher job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and higher person organisation fit. This is hypothesised due to individuals potentially feeling significantly happier with their job and career progression than individuals who do not feel their employment is appropriate to their education level.

Work Experience Importance in Acquiring First Job

Blasko, et al., (2002) found that graduates with a large amount of work experience related to study, were more likely than those with unrelated or no work experience to indicate that the practical work experience they acquired while studying was an important factor in securing their first job after graduation. Graduates who had no work experience during their studies were found to be somewhat less likely to be employed than those with some form of work experience (Blasko, et al., 2002). This variable has been incorporated into the current study as a measure of the direct influence that an individual's work experience can have on their ability to secure a job post graduation. Subsequently, the following prediction was established:

Hypothesis 12: *Graduates in the 'Related' group are more likely to feel that the work experience they gained while studying was an important factor in successfully acquiring their first job post graduation than those in the 'Unrelated' group.*

The 'None' group, having no work experience to use have been omitted from this hypothesis as individuals in this group would presumably find their lack

of work experience a hindrance in finding their first job after graduation. The present study's groups have been ordered in the above way based on the previously argued assumption that graduates with work experience related to their field of study would find their work experience more important in acquiring their first job post graduation than individuals in the 'Unrelated' group. Individuals in the 'Unrelated' group would subsequently find their work experience less important in helping them find a job post graduation.

Employed Full Time

Blasko, et al., (2002) found that graduates without any work experience were the least likely to have been in regular jobs since graduation and the most likely to have been unemployed. The employed full time variable was included in the present study as a measure of the influence that part-time work experience could have on a graduate's ability to secure a full time position post graduation. Subsequently the following prediction was established:

Hypothesis 13: *Graduates in the 'Related' group are more likely to be employed full time than those in the 'Unrelated' group, followed by graduates in the 'None' group.*

The present study's three groups have been ordered in the above way based on the assumption that graduates with work experience related to their field of study are more likely to acquire a full-time job because of the superiority of their related work experience. Individuals with unrelated experience would presumably find this harder followed by graduates in the 'None' group due to their respective unrelated and nonexistent work experience.

Qualification or Formal Training

Blasko, et al., (2002) asked recent graduates the extent that they utilized the knowledge or skills learnt throughout the course of their degree in their current employment. Their results showed that those who had a great deal of related work experience were using the knowledge, skills and abilities learnt from their degree(s) more frequently than those with unrelated work experience who were in turn significantly more likely to be using their degree knowledge and skills than those with no work experience at all (Blasko, et al., 2002). Graduates in the present study were asked to report the qualifications or formal training necessary for an individual to do his/her job. This variable was included in the present study to determine whether the participant's type of work experience enabled them to secure a higher level job after graduation.

Hypothesis 14: *Graduates in the 'Related' group are more likely to have secured a job requiring a qualification or formal training than those in the 'Unrelated' group, followed by graduates in the 'None' group.*

The present study's three groups have been ordered in the above way based on the assumption that graduates with related work experience would be more likely to secure a higher level job because of the superiority of their work experience. The 'Unrelated' group were hypothesised to be less likely to obtain a higher level job due to these individuals having work experience irrelevant to their field of study which would presumably have less influence on facilitating the individual to obtain a higher level job. Extending this theory, graduates with no work experience would be significantly less likely to secure a higher level job due to their lack of work experience before graduation.

Summary

This chapter provides an overview of the current literature related to this study. It has provided some background information on New Zealand's university structure, and provided the reader with an understanding of how the current educational system arose. This chapter has detailed the study's original aims and groups, provided an explanation as to why these aims had to be reformulated as well as presenting in detail the new aims, groups and hypotheses of the study. Finally, a sound rationale for the study overall has been provided, for the variables used and the reasoning behind each individual hypothesis. The following chapter will detail the participant eligibility criteria, the procedure of the study and the measures used to examine the study's variables.

Chapter Two – Method

Participants

The study was open to individuals who:

- a) Were high school-leavers. ‘School-leavers’ is a colloquial term used to describe individuals who went to university directly after high school, without taking time out from education to work or travel. The participants in the present study were required to be school-leavers as it was important that the graduates had not worked full time for a period longer than three months before starting their degree(s). This period is classified as the months between finishing high school and beginning university; December-February. This exclusion criterion was necessary to ensure that the work experience that is measured is the work experience the individual gained while being enrolled at a university. Furthermore, this will ensure that the graduate’s career outcomes can be compared on an equivalent level.
- b) Were full time students. Participants had to have been enrolled in a full time, formal university qualification before graduating and entering the workforce. A full time student was defined as an individual who was enrolled in a program of study at one of New Zealand’s eight universities for a full year that equated to between 0.8 EFTS (Equivalent Full-time Student) and 1.2 EFTS (StudyLink, 2012). Conversely, Studylink (2012) defines a part-time student as an individual who is enrolled in a program of study part-time for a full year or part-time for part of the year that equates to a minimum value of 0.25 EFTS. The present research looked

exclusively at full time students as Blasko, et al., (2002) found that employment related to study was much more common among part-time than full-time students. The part-time student is likely to have chosen or been directed to do a degree related to their present job. In comparison, the full time student is likely to have searched for or been guided towards work that would complement their studies or simply supplement them financially (Blasko, et al., 2002). Therefore, a part-time student's related work experience is potentially vast and more comprehensive than the degree itself. Subsequently, it was important for the present study to only include full time students as including part-time students would potentially affect any differences found between the '*None*', '*Unrelated*' and '*Related*' groups.

- c) Graduated no more than five years ago from their undergraduate or graduate degree. In other words, participants must have completed either their Bachelors degree(s) or their Post Graduate degree(s) and be either currently employed or searching for some form of work. This criterion was necessary to ensure that the study compared participants who graduated within a similar time frame and who were on an equivalent level as far as education was concerned.
- d) Completed their degree(s) without taking any time out from university education to work or travel. In other words, participants must have studied continuously towards their degree(s) at one of New Zealand's eight universities until graduation, without gaining any full time work experience, other than work experience acquired over the three month summer vacation period (December – February). Furthermore, if the

graduate completed a degree(s) with an inbuilt placement or internship, they must have been considered to be studying full time while completing the internship/placement. This criterion was essential to ensure participants were being compared on a similar bench mark with regards to their work experience before graduation.

Two hundred and sixty eight individuals opened the link to the survey, however only 168 completed it, resulting in an initial response rate of 62.7%. This potentially indicates that another 100 people were willing to participate in the study but did not meet the study's strict criteria. A further 38 (14.1%) responses were removed due to the participants not meeting the necessary criteria or because of the level of incomplete data (>10% missing data). As advocated by Roth, Switzer and Switzer (1999), within-person mean substitution was adopted as a method to manage the missing data. An additional 56 cases had data missing from which no single case had more than 2% missing. The final sample consisted of 130 participants, an overall response rate of 48.5%.

The final sample comprised 93 females (71.5%) and 33 males (25.4%), with four respondents (3.1%) not indicating their gender. Participants had to be between the ages of 20 and 32 to have attended university directly after high school and graduated from their degree(s) within the last five years. Subsequently, the mean age was 24.19 with a standard deviation of 2.55 ($M = 24.19$, $SD = 2.55$), with fifteen respondents (11.5%) not indicating their age. New Zealand European was the most prevalent ethnicity in the sample ($n = 96$, 73.8%). The remainder of the sample was made up of Asian (12.3%), Maori (3.1%), European (2.3%), Pacific Peoples (1.5%), Indian (1.5%), and Arab (0.8%), with six respondents (4.6%) not indicating their ethnicity.

One hundred and twenty four respondents (95.4%) received some form of financial assistance while they were completing their university degree(s). Respondents most frequently indicated they received a student loan (n = 48, 36.9%) closely followed by receiving both a student loan and a student allowance (n = 32, 24.6%). Six respondents indicated they only received a student allowance (4.6%) while eleven participants (8.5%) reported receiving the student loan, the student allowance and at least one other form of financial assistance. The remaining participants indicated they received the student loan and at least one other form of financial assistance (n = 27, 20.8%) while six respondents (4.6%) either received no financial support while studying or did not indicate the type they received.

Participants indicated their primary reason for entering paid part-time employment while completing their university degree(s). Not surprisingly, the most frequent answer was for economic reasons (n = 58, 44.6%) and career or experience reasons followed (n = 15, 11.6%). Enjoyment (n = 2, 1.5%) and developing knowledge or skills (n = 2, 1.5%) were the other reasons reported, with 53 respondents (40.8%) who either did not work while studying or who did not indicate their reasons.

Eighty three respondents (63.8%) had graduated with a bachelors degree while 34.6% (n = 45) graduated with a post bachelors qualification. Two respondents (1.5%) chose not to indicate their qualification level. Thirty eight (29.2%) of participants completed their qualification in three years, 33.8% (n = 44) completed in four years, 20.8% (n = 27) completed in five years, 11.5% (n = 15) completed in six years, while 2.3% (n = 3) completed in seven years, and

2.3% ($n = 3$) graduated from their qualification(s) after eight years ($M = 2.84$, $SD = 1.40$).

Twenty participants (15.4%) had graduated within the last six months or less, 44 participants (33.8%) graduated between six months and one year ago, 23.8% of participants ($n = 31$) graduated between one and two years ago, 11.5% ($n = 15$) graduated between two and three years ago, 9.2% ($n = 12$) graduated between three and four years ago while only 8 participants (6.2%) graduated between four and five years ago ($M = 2.31$, $SD = 1.20$). On average, participants applied for 6-10 jobs ($SD = 1.81$) before being offered a position while the majority of participants (36.2%) applied for 1-5 jobs ($n = 47$). There were 23 respondents (17.7%) who did not indicate the number of jobs they had applied for. Participants who were in work at the time of completing the survey worked 40.39 hours per week on average ($M = 40.39$, $SD = 10.26$) while eight respondents (6.2%) were either currently unemployed or did not indicate how many hours they work per week.

Twenty respondents (15.4%) left New Zealand after graduating from university for various reasons, and at the time of the survey had not returned. Ten respondents (7.7%) left New Zealand to get a better or higher paying job in their field, three participants (2.3%) left to go travelling and to get life or career experience, and four respondents (3.1%) left as they were not New Zealand citizens or because they were obligated to return to their home country.

At the time of completing the survey, participants had been employed with their current employer for one year and one month on average ($SD = 1.45$) and had been employed in their current position for eight months on average ($SD = 1.29$) with one participant not indicating their tenure in their current job.

Procedure

The participants were recruited from alumni organisations, social media and other websites. The online questionnaire was selected for several reasons: to preserve participants' anonymity, to economically reach a large number of respondents who are geographically dispersed, to ask sensitive questions with no researcher present and because participants could complete the questionnaire in their own time, at their own pace (Sue & Ritter, 2007). Furthermore, an internet survey can be programmed to skip various questions that don't apply to individual participants, based on a particular answer they may provide for certain questions. Self report methods to gather data have been recommended by Spector (1994) as an easy first step to study trends of interest and provide insights in to the relationships between variables. The questionnaire contained items from the selected measurement tools (job, life and career satisfaction, affective organisational commitment and person organisation fit) to assess the impact that paid part-time employment has on university graduate's job prospects and career outcomes, using self-report measures.

Firstly, four out of a possible eight New Zealand alumni organisations agreed to participate in the study. Consent to include a short description in alumni communications was gained via email from the appropriate alumni staff, usually the Alumni Database Managers, after they were informed of the nature of the research. Three out of the four participating alumni helped to promote the research to potential participants by putting a short description (see Appendix A, page 99) about the research into their online newsletters which were sent out to individuals signed up to their respective databases. The final participating alumni sent out a personalised, targeted email to approximately 1000 of their alumni members who

were likely to meet the necessary criteria. The short description of the research that the alumni sent out included a link which when clicked on by potential participants connected them to the online questionnaire hosted by Qualtrics (see Appendix D, page 102 for a hard copy of the questionnaire). The participants were first presented with an information page (see Appendix B, page 100) informing individuals of the purpose of the study, of its voluntary and anonymous nature and how long the questionnaire would take to complete. Additionally, the information page provided email addresses for those who had reservations about the ethical nature of the study and for those who wanted to know more. Finally, the information page detailed how to enter the draw for the participation incentive which was a night away for two people in Napier. Participants could then choose whether or not to carry on and participate in the study. Those individuals who chose to continue were presented with a page detailing the necessary criteria they had to meet to be eligible to complete the questionnaire (see Appendix C, page 101).

Secondly, a short description of the research with a link to the questionnaire was included into two issues of the New Zealand Psychological Society's (NZPS) E-newsletter. Thirdly, 'Get Participants', a website to help researchers recruit participants, ran the questionnaire through their website for three months, featured the study in their online newsletter and did some targeted 'Facebook' advertising. Finally, participants were gathered through the following social media websites; 'LinkedIn', 'Facebook' and 'Grad Connection'. Posting about the study with an invitation to participate in the online questionnaire was done on these sites approximately once every fortnight. Additionally, the message

boards on ‘TradeMe’ and ‘Craigslislist’ were utilised in the same way as the social media websites.

Participants were then presented with a ‘thank you’ page (see Appendix E, page 110) upon completion of the questionnaire which thanked them for their participation, reminded them about the option to go into the draw to win the participation incentive and provided them with information on how to receive a summary of the findings if they were interested in the results from the research. This research process was reviewed and approved by the School of Psychology Research and Ethics Committee at the University of Waikato (see Appendix F, page 111).

Measures

The questionnaire contained 54 self-report items (see Appendix D, page 102), of which 22 items measured five distinct constructs: job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and person organisation fit. These 22 items required respondents to determine how much they felt each item described themselves on a 7-point Likert type scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 6 = agree and 7 = strongly agree. The integrity of these variables was measured through factor analysis. The results of this analysis are reported in the Results section on page 55.

The remaining 32 items asked participants to report on various employment related variables and outcomes. These items posed questions to participants on their university and employment history, their current employment and their demographics. The response scales for these 32 items varied from

question to question but were usually on a comparable 5 or 7-point scale. The aforementioned items facilitated the objectives of the study and enabled the creation of the three groups ‘None’, ‘Unrelated’ and ‘Related’. These 32 items were then subjected to a series of one-way analysis of variance (ANOVA) using IBM SPSS Statistics (version20), to determine whether there was a statistically significant difference between the three groups. When significant results were discovered from the ANOVA post hoc testing was conducted by way of Tukey’s HSD (honestly significant difference) or The Games-Howell procedure (Field, 2009) to determine between which groups the significant difference was found.

Job Satisfaction

The Overall Job Satisfaction Scale developed by Cammann, Fichman, Jenkins, and Klesh (1983) was used to measure overall job satisfaction. The scale uses three items to describe an employee’s subjective response to working in his or her job and organisation and is a global indication of worker satisfaction with a job. Item two, “In general, I don’t like my job” was reverse scored to reduce the influence of responses biases such as acquiescence. The other two items were: “All in all, I am satisfied with my job” and “In general, I like working here”. The current study obtained a Cronbach’s internal α value of 0.89 which is considered an acceptable level (Nunnally, 1994). Participants were asked to respond on a 7-point scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = agree and 7 = strongly agree.

Career Satisfaction

Greenhaus, Parasuraman and Wormley’s (1990) 5-item Career Satisfaction Scale was used to measure career satisfaction. This scale measures general

satisfaction with career success and growth as well as satisfactory progress towards goals for income level, advancement, and development of skills (Greenhaus, et al., 1990). Sample items include: “I am satisfied with the progress I have made toward meeting my overall career goals” and “I am satisfied with the progress I have made toward meeting my goals for income”. The current study obtained a Cronbach’s internal α value of 0.92 which is considered an acceptable level (Nunnally, 1994). Participants were asked to respond on the same 7-point scale used for ‘Job Satisfaction’ (above).

Life Satisfaction

The scale used to measure life satisfaction was the five-item Satisfaction with Life Scale (SWLS) designed by Diener, Emmons, Larsen and Griffin (1985). The SWLS measures global or overall life satisfaction, rather than measuring satisfaction with specific domains. It has been administered to many different groups of participants and has been found to have high internal consistency and reliability across gender, ethnicity, and age (Diener, et al., 1985). Sample items include: “I am satisfied with my life” and “So far I have attained the important things I want in life”. The current study obtained a Cronbach’s internal α value of 0.90 which is considered an acceptable level (Nunnally, 1994). Participants were asked to respond on the same 7-point scale used for ‘Job Satisfaction’ (above).

Affective Organisational Commitment

Affective organisational commitment was measured using Meyer and Allen’s (1997) revised 6-item Affective Commitment Scale. This scale measures an employee’s emotional attachment to, identification with, and involvement in the organisation (Meyer & Allen, 1997). Items three, “I do not feel like “part of

the family” at my organization”, four, “I do not feel “emotionally attached” to my organization” and six, “I do not feel a strong sense of belonging to my organization” were reverse scored to reduce the influence of response biases. Sample items include: “I really feel as if my organization’s problems are my own” and “My organization has a great deal of personal meaning for me”. Following the removal of item three and item six (indicated by factor analysis and discussed in the Results section on page 55). Cronbach’s alpha was calculated and an acceptable internal α value of 0.82 was found (Nunnally, 1994). Participants were asked to respond on the same 7-point scale used for ‘Job Satisfaction’ (above).

Person Organisation Fit

Cable and Judge’s (1996) Perceived Person Organisation Fit Scale was used to measure person organisation fit. The scale uses three items to directly assess an employee’s perception of his or her fit with an organisation. Sample items include: “My values “match” or “fit” my organisation and the current employees in my organisation” and “The values and “personality” of my organisation reflect my own values and personality”. The current study obtained a Cronbach’s internal α value of 0.91 which is considered an acceptable level (Nunnally, 1994). Participants were asked to respond on the same 7-point scale used for ‘Job Satisfaction’ (above).

Number of Jobs Applied for

The number of jobs recent graduates applied for before securing a job was measured by participants reporting the number of jobs they applied for “While searching for your first job after graduation, approximately how many jobs did you apply for before being offered a position?” Responses were then coded from

0 to 7 where 0 = 0 jobs/remained in part-time job held while at university, 1 = 1-5 jobs, 2 = 6-10 jobs, 3 = 11-20 jobs, 4 = 21-40 jobs, 5 = 41-60 jobs, 6 = 61-80 jobs and 7 = 81 jobs or more.

Starting Salary

The starting salary was measured via participants reporting their starting wage in thousands of dollars, “please indicate your starting salary level from your first job after graduating/completion of your qualification”. Participants answers were coded from 1 to 9 where 1 = less than NZ\$30,000, 2 = \$30,000- \$40,000, 3 = \$40,000 - \$50,000, 4 = \$50,000 - \$60,000, 5 = \$60,000 - \$70,000, 6 = \$70,000 - \$80,000, 7 = \$80,000 - \$90,000, 8 = \$90,000 - \$100,000 and 9 = \$100,000 or more.

The Influence of Work Experience on Gaining a Satisfactory Job

Whether the participants’ work experience had helped them to acquire a ‘satisfying job’ after graduating was measured by the participants reporting how useful the work experience they gained while at university was in helping them find a ‘satisfying job’ post graduation. In response to the question “how useful was the work experience you gained during your university qualification (include internship/placement) in helping you find a satisfying job after graduation?”. Participants were asked to respond on a 7-point scale where 1 = very useful, 2 = somewhat useful, 3 = useful, 4 = neither useful nor useless, 5 = useless, 6 = somewhat useless and 7 = very useless.

Preparedness for Full-time Employment

Whether the participants felt that they were prepared for full time employment after graduating from their university degree(s) was measured by the participants reporting how useful the work experience they gained while at university was in preparing them for full-time employment. Participants were asked the following question, “how useful was the work experience you gained during your university qualification (include internship/placement) in preparing you for full-time employment? Participants were asked to respond on the same 7-point scale used for ‘Work Experience Influence on Satisfactory Job’ (above).

Appropriateness of employment to education level

The employment appropriate to education variable was measured by participants reporting whether or not they felt that their current employment was appropriate to their level of education. Participants were asked to respond by selecting either 1 = yes or 2 = no, please specify why. All responses were then categorized into 1 = yes, 2 = overqualified/ job not challenging/not related to degree, 3 = under qualified, 4 = under paid and 5 = unsure of reason. Overqualified, job not challenging enough and job not related to degree were cited as the most common reason individuals felt their employment was not appropriate to their level of education.

Appropriate Employment Influence on Constructs

When graduates feel that their employment is appropriate to their level of education they will potentially have higher levels of job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and person organisation fit. This variable was measured by looking at the reported levels of

satisfaction, commitment and fit of those participants who had said that they felt their employment was appropriate to their level of education. Only individuals who answered 'yes' to the question "do you feel that your current employment is appropriate to your level of education?" were included in the analysis of this variable.

Work Experience Importance in Acquiring First Job

The work experience important in acquiring first job variable was measured by participants reporting whether or not they felt that the work experience they acquired while studying was an important factor in their job searching process and/or for being recruited into their first job. Participants were asked to respond on a 5-point scale where 1 = yes, very important, 2 = yes, important, 3 = neither important nor not-important, 4 = no, not really important and 5 = no, not important.

Employed Full Time

Participants were asked to report their current employment status to measure which graduates had managed to secure full time employment. Participants were asked "are you currently employed?" and answers were given on a 5-point scale where 1 = no, and not seeking work, 2 = no, and seeking work, 3 = yes, part-time, 4 = yes, part-time and seeking additional work and 5 = yes, full-time.

Qualification or Formal Training

Whether the participants held a job that required a qualification or some type of formal training was measured by the participants reporting the

qualification(s) or formal training required for an individual to do his/her job. Respondents were asked to think about their primary job and answers were coded into 1 = none (trained on the job/beneficial but not mandatory), 2 = formal training/work experience, 3 = qualification (Bachelors or Post-Bachelors) and 4 = both formal training/work experience and a qualification.

Chapter Three – Results:

The results of the study are categorised by the five constructs, job satisfaction, career satisfaction, life satisfaction, person organisation fit and affective organisational commitment. The results are also categorised by the nine employment related variables, employed full time, student work experience importance in acquiring first job, qualification or formal training, appropriateness of employment to education level, starting salary, preparedness for full-time employment, number of jobs applied for, student work experience influence on satisfactory job and appropriate employment influence on constructs. These constructs and variables are discussed in relation to the three groups of the study, ‘None’ (no work experience while studying), ‘Unrelated’ (unrelated work experience while studying) and ‘Related’ (related work experience while studying). The objectives of the study were to discover whether there were various employment related differences between recent graduates as defined by these groupings.

Factor analysis of measures

Principal axis factoring analysis (PAF) was conducted on the 22 items that form the five constructs (job satisfaction, career satisfaction, life satisfaction, person organisation fit and affective organisational commitment) to measure the relationships between the variables (see Appendix G, page 112 for a description of all items and Appendix H, page 113 for the Pattern Matrix). This was done by way of Principal Axis Factoring and Direct Oblimin using SPSS. Factor loading results are presented in Table H.1 on page

Bartlett's test of sphericity $\chi^2(231) = 2229.31, p < 0.01$, indicated that the correlations between all 22 items were sufficiently large enough for PAF (see table 2 below for correlations between scales). An initial overall analysis was conducted to obtain eigenvalues for each component in the data. The extraction of five factors was deliberately specified as there were five separate constructs to be analysed, see Table H.2, page 114 for initial eigenvalues and the percent of variance explained. Four components had initial eigenvalues over Kaiser's criterion of 1 and in combination explained 72.2% of the variance. A fifth component was examined as the initial eigenvalue was 0.80 and the factor explained 3.7% of the variance, making the cumulative percent of variance 75.9%. The scree plot, see Figure H.1, page 114, was somewhat ambiguous as it showed inflexions that justified retaining both components 4 and 5. However, the factor analysis indicated a separation between all five factors, with all items loading appropriately onto their respective factors, with the exception of the recoded AOC3 and AOC6 items (discussed below). Appendix H page 113, table H.1, page 114 show the factor loadings after rotation. The items that cluster on the same components suggest that component one represents job satisfaction, component two life satisfaction, component three career satisfaction, component four affective organisational commitment and component five person organisation fit. Therefore, given the sample size, the convergence of the scree plot, the clustering of the 22 items on to five separate components and the factor analysis results, five components were retained in the final analysis.

All five scales produced a one factor solution, job satisfaction eigenvalue = 2.47, career satisfaction eigenvalue = 3.84, life satisfaction eigenvalue = 3.61, affective organisational commitment eigenvalue = 2.63 and person organisation fit

eigenvalue = 2.56 which were confirmed by the scree plot. Oblique rotation, with Kaiser Normalisation was used and the Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = 0.92 ('superb' according to Field, 2009 & Hutcheon & Sofroniou, 1999). Additionally, all five scales produced Kaiser-Meyer-Olkin (KMO) measures that are considered to be either 'good' or 'great' according to Field (2009), job satisfaction (KMO = 0.74), career satisfaction (KMO = 0.83), life satisfaction (KMO = 0.86), affective organisational commitment (KMO = 0.75) and person organisation fit (KMO = 0.73).

There was a positive correlation between all five constructs (0.40 – 0.76), between job satisfaction and life satisfaction, $r = 0.60$, job satisfaction and career satisfaction, $r = 0.76$, between job satisfaction and person organisation fit, $r = 0.73$, job satisfaction and affective organisational commitment, $r = 0.65$, life satisfaction and career satisfaction, $r = 0.66$, between life satisfaction and person organisation fit, $r = 0.56$, life satisfaction and affective organisational commitment, $r = 0.40$, between career satisfaction and person organisation fit, $r = 0.67$, career satisfaction and affective organisational commitment, $r = 0.57$ and between person organisation fit and affective organisational commitment, $r = 0.65$ (see table 2, page 60). These correlations do not reach the level of overlap ($r = 0.80$), which Field (2009) suggested indicates multicollinearity. Therefore, multicollinearity does not exist between these variables and common method bias was not an issue with this research. Common method bias occurs when correlations between variables are inflated because each variable is measured using the same method (Spector, 1994).

Table 1 – Descriptive Statistics: Constructs

Description	Mean	Std. Deviation	Skewness	Kurtosis	Alpha
Job Satisfaction	5.28	1.45	-0.92	0.05	0.89
Career Satisfaction	4.71	1.47	-0.78	0.03	0.92
Life Satisfaction	4.62	1.39	-0.63	0.44	0.90
Person Organisation Fit	3.93	1.42	-0.89	0.01	0.82
Affective Organisational Commitment	4.97	1.51	-0.13	0.97	0.91

Std. Error of Skewness = 0.21, Std. Error of Kurtosis = 0.42

7-Point scale – 1 = Strongly Disagree, 7 = Strongly Agree

Job Satisfaction

Principal axis factoring analysis (PAF) was conducted on the three item job satisfaction scale with oblique rotation, (Oblimin with Kaiser Normalisation) see Appendix G, page 112 for a description of all of the items and Appendix H, page 113 for the Pattern Matrix. According to Field (2009) the Kaiser-Meyer-Olkin (KMO) measure is considered to be ‘good’ (KMO = 0.74), thereby verifying the sampling adequacy for the analysis. The job satisfaction scale produced a one factor solution (eigenvalue = 2.47) which was confirmed by the scree plot, explaining 74% of the total variance. All three items had factor loadings greater than 0.81. See figure H.2 page 115 for scree plot and table H.3 on page 115 for factor loadings, eigenvalues and percent of variance explained. Cronbach’s internal alpha reliability value fell within the acceptable parameters as stated by Kline (2011), $\alpha = 0.89$, see Table 1, page 57 or table H3, page 115. The mean value for the job satisfaction scale was 5.28 ($SD = 1.45$) which was above the midpoint of 4.33.

Hypothesis 1 proposed that there would be a positive and significant difference between the three groups, ‘None’ ($\bar{x} = 5.20$, $SD = 1.79$), ‘Unrelated’ (\bar{x}

= 5.09, $SD = 1.46$) and '*Related*' ($\bar{x} = 5.49$, $SD = 1.15$) on job satisfaction. The differences in the group means was proposed to be highest for the '*Related*' group, then for the '*Unrelated*' group and weakest for the '*None*' group. The Levene's test was used to test for homogeneity of variances as having equal variances is one of the necessary assumptions of an ANOVA (Coakes, Steed & Dzidic, 2006; Field, 2009).

The test revealed unequal variances between the three groups for the job satisfaction variable ($p = 0.000$). Subsequently, Welch's F statistic was used as it adjusts F and the residual degrees of freedom to combat problems arising from violations of the homogeneity of variance assumption (Field, 2009). Welch's F revealed that graduates' job satisfaction levels were not significantly affected by the type of work experience the graduate gained, ($F(2,72.8) = 0.34$, $p > 0.05$). No statistically significant differences were found between the means of any of the groups ($p = 0.40$) on job satisfaction, as determined by a one-way analysis of variance (ANOVA). Therefore hypothesis 1 was not supported, as there were no significant differences between any of the three groups.

Career Satisfaction

PAF analysis was conducted on the five item career satisfaction scale with oblique rotation, (Oblimin with Kaiser Normalisation) see Appendix G, page 112 for a description of all of the items and Appendix H, page 113 for the Pattern Matrix. The KMO measure verified the sampling adequacy for the analysis, KMO = 0.83 ('great' according to Field, 2009). A one factor solution (eigenvalue = 3.84) was produced and confirmed by the scree plot, explaining 71.5% of the total variance. All five items had factor loadings greater than 0.70. See figure H.3 for scree plot and table H.4 on page 116 for factor loadings, eigenvalues and percent

of variance explained. Cronbach's internal alpha reliability value was in the acceptable region as indicated by Kline (2011), $\alpha = 0.92$, see Table 1 or table H.4. The mean value for the career satisfaction scale was 4.77 ($SD = 1.47$) which was above the midpoint of 4.30.

Hypothesis 2 proposed that there would be a positive and significant difference between the three groups on career satisfaction. Means and standard deviations for the three groups were as follows; 'None' ($\bar{x} = 4.70$, $SD = 1.73$), 'Unrelated' ($\bar{x} = 4.45$, $SD = 1.56$) and 'Related' ($\bar{x} = 5.04$, $SD = 1.13$). The differences in the group means was proposed to be highest for the 'Related' group, then for the 'Unrelated' group and weakest for the 'None' group.

A one-way ANOVA was performed on the variable career satisfaction to compare the differences in the means between the 'None', 'Unrelated' and 'Related' groups. The Levene's test (Coakes, Steed & Dzidic, 2006) revealed unequal variances between the three groups for the job satisfaction variable ($p = 0.007$). Subsequently, Welch's F statistic (Field, 2009) revealed that graduates' career satisfaction levels were not significantly affected by the type of work experience the graduate gained, ($F(2,72) = 0.12$, $p > 0.05$). Consequently, hypothesis 2 was unsupported due to the lack of significant differences between any of the three groups.

Life Satisfaction

PAF analysis was conducted on the five item life satisfaction scale with oblique rotation, (Oblimin with Kaiser Normalisation) see Appendix G, page 112 for a description of all of the items and Appendix H, page 113 for the Pattern Matrix. The KMO measure verified the sampling adequacy for the analysis, $KMO = 0.86$

Table 2 – Correlations of variables

	Job Satisfaction	Career Satisfaction	Life Satisfaction	Person Organisation Fit	Affective Organisational Commitment
Job Satisfaction		0.77	0.60	0.73	0.65
Career Satisfaction	0.77		0.66	0.67	0.57
Life Satisfaction	0.60	0.66		0.56	0.40
Person Organisation Fit	0.73	0.67	0.56		0.65
Affective Organisational Commitment	0.65	0.57	0.40	0.65	

All correlations significant at $p < 0.01$

(‘great’ according to Field, 2009). A one factor solution (eigenvalue = 3.61) was produced and confirmed by the scree plot, explaining 65.9% of the total variance. All five items had factor loadings greater than 0.72. See figure H.4 for scree plot and table H.5 on page 117 for factor loadings, eigenvalues and percent of variance explained. Cronbach’s internal alpha reliability value was in the acceptable region as indicated by Field (2009), $\alpha = 0.90$, see Table 1 or table H.5. The mean value for the life satisfaction scale was 4.62 ($SD = 1.39$) which was above the midpoint of 4.20.

Hypothesis 3 proposed that there would be a positive and significant difference between the three groups, ‘None’ ($\bar{x} = 4.49$, $SD = 1.43$), ‘Unrelated’ ($\bar{x} = 4.55$, $SD = 1.43$) and ‘Related’ ($\bar{x} = 4.75$, $SD = 1.35$) on life satisfaction. The differences in the group means was proposed to be highest for the ‘Related’ group, then for the ‘Unrelated’ group and weakest for the ‘None’ group.

A one-way ANOVA was performed on life satisfaction to compare the differences in the means between the ‘None’, ‘Unrelated’ and ‘Related’ groups. The ANOVA revealed no statistically significant differences between any of the groups ($p = 0.64$). Specifically, graduates’ life satisfaction levels were not

significantly affected by the type of work experience the graduate gained, ($F(2,127) = 0.445, p > 0.05$). As there were no statistically significant differences between any of the three groups, hypothesis 3 was not supported.

Affective Organisational Commitment

PAF analysis was conducted on the six item affective organisational commitment scale with oblique rotation, (Oblimin with Kaiser Normalisation) see Appendix G, page 112 for a description of all of the items and Appendix H, page 113 for the Pattern Matrix. The KMO measure verified the sampling adequacy for the analysis, $KMO = 0.75$ ('good' according to Field, 2009 & Hutcheon & Sofroniou, 1999). The affective organisational commitment scale produced a one factor solution (eigenvalue = 2.63), which was confirmed by the scree plot, explaining 55.5% of the total variance. Cronbach's internal alpha reliability value fell within the acceptable region as indicated by Kline (2011) and Field (2009), $\alpha = 0.83$,

The criterion used for the factor-loading cut-off point for each individual item was 0.4, as recommended by Field (2009). One factor loading fell below this cut-off point; recode AOC6 (0.37, see Appendix H, Table H.1, pg. 21) "I do not feel a strong sense of belonging to my organization" which was subsequently dropped from any further analysis. The variable recode AOC3 "I do not feel like "part of the family" at my organization" was found to load strongly on to the person organisation fit measure (0.69, see Table H.1, pg. 21). As the item did not appear to be measuring an individual's commitment to their organisation, the item was dropped from the affective organisational commitment measure resulting in the scale consisting of four items. All four items had factor loadings greater than 0.64. See figure H.5 for scree plot and table H.6 on page 118 for factor loadings,

eigenvalues and percent of variance explained. Cronbach's internal alpha reliability value was calculated again with the four items and was found to be within in the acceptable region as indicated by Kline (2011) and Field (2009), $\alpha = 0.82$, see Table 1 or table H.6. The mean value for the affective organisational commitment scale was 3.93 ($SD = 1.42$) which was below the midpoint of 4.12.

Hypothesis 4 proposed that there would be a positive and significant difference between the three groups, 'None' ($\bar{x} = 3.81$, $SD = 1.67$), 'Unrelated' ($\bar{x} = 3.78$, $SD = 1.45$) and 'Related' ($\bar{x} = 4.14$, $SD = 1.17$) on affective organisational commitment. The differences in the group means was proposed to be highest for the 'Related' group, then for the 'Unrelated' group and weakest for the 'None' group.

The Levene's test (Field, 2009) showed unequal variances between the three groups for the job satisfaction variable ($p = 0.004$). Subsequently, Welch's F statistic (Field, 2009) revealed that graduates' affective organisational commitment levels were not significantly affected by the type of work experience the graduate gained, ($F(2,74.1) = 0.36$, $p > 0.05$). There were no statistically significant differences between the means of any of the groups ($p = .40$) on affective organisational commitment, as determined by a one-way analysis of variance (ANOVA). Consequently, as there were no significant differences between any of the groups, hypothesis 4 was not supported.

Person Organisation Fit

PAF analysis was conducted on the three item person organisation fit scale with oblique rotation, (Oblimin with Kaiser Normalisation) see Appendix G, pg. 112 for a description of all of the items and Appendix H, pge 113 for the Pattern Matrix. The KMO measure is considered to be 'good' ($KMO = 0.73$) according to

Field (2009), thereby verifying the sampling adequacy for the analysis. The person organisation fit scale produced a one factor solution (eigenvalue = 2.56), which was confirmed by the scree plot, explaining 78.6% of the total variance. All three items had factor loadings greater than 0.79. See figure H.6 for scree plot and table H.7 on page 119 for factor loadings, eigenvalues and percent of variance explained. Cronbach's internal alpha reliability value fell within the acceptable parameters as stated by and Field (2009), $\alpha = 0.91$, see Table 1 or table H.7. The mean value for the person organisation fit scale was 4.97 ($SD = 1.51$) which was above the midpoint of 4.00.

Hypothesis 5 proposed that there would be a positive and significant difference between the three groups, 'None' ($\bar{x} = 4.69$, $SD = 1.75$), 'Unrelated' ($\bar{x} = 5.05$, $SD = 1.53$) and 'Related' ($\bar{x} = 5.12$, $SD = 1.29$) on person organisation fit. The differences in the group means was proposed to be highest for the 'Related' group, then for the 'Unrelated' group and weakest for the 'None' group.

There were no statistically significant differences between the means of any of the groups ($p = 0.38$) on person organisation fit, as determined by a one-way analysis of variance. Specifically, graduates' person organisation fit levels were not significantly affected by the type of work experience the graduate gained, ($F(2,127) = 0.973$, $p > 0.05$). Therefore, hypothesis 5 was not supported as there were no statistically significant differences between any of the groups.

Number of Jobs Applied for

Hypothesis 6 proposed that there would be a significant difference between the three groups on the number of jobs participants applied for. Graduates in the 'Related' group were more likely to have applied for fewer jobs than those in the 'Unrelated' group followed by those in the 'None' group.

A one-way analysis of variance (ANOVA) determined that there was a statistically significant difference between the three groups on '*number of jobs applied for*', ($F(2,104) = 4.236, p < 0.05$). The mean value for the '*Related*' group was 1.76 (SD = 1.44), the '*Unrelated*' group was 2.53 (SD = 1.79) and for the '*None*' group was 2.90 (SD = 2.11) (see Table 3, page 65).

Tukey's HSD (honestly significant difference) *post-hoc* test was used as the procedure controls the Type 1 error rate very well when dealing with equal variances and sample sizes (Field, 2009). Tukey's test revealed that the '*None*' group applied for a significantly larger number of jobs than the '*Related*' group, ($p < .05$). There were no statistically significant differences between the '*Related*' and '*Unrelated*' groups ($p = .153$) or between the '*Unrelated*' and '*None*' groups ($p = .691$). Hypothesis 6 was therefore partially supported as a significant difference was found between the '*Related*' and '*None*' groups but not between the '*Related*' and '*Unrelated*' groups or between the '*Unrelated*' and '*None*' groups.

Starting Salary

Hypothesis 7 proposed that there would be a significant difference between the three groups on the participants starting salary. Graduates in the '*Related*' group are more likely to have started on a higher salary than those in the '*Unrelated*' group followed by graduates in the '*None*' group. A one-way analysis of variance was performed on '*starting salary*'. The ANOVA revealed that there was a statistically significant difference between the three groups on '*starting salary*', ($F(2,119) = 10.238, p < .05$). The mean value for the '*Related*' group was 46.49 (SD = 12.62), the '*Unrelated*' group was 45.17 (SD = 11.77) and for the '*None*' group was 35.97 (SD = 7.31) (see Table 3 below).

Table 3 – Descriptive Statistics: Career outcome variables

Description	Mean			Standard Deviation		
	R	U	N	R	U	N
Number of jobs applied for	1.76	2.53	2.90	1.44	1.79	2.11
Starting salary	46.49	45.17	35.97	12.62	11.77	7.31
Work experience influence on satisfactory job	2.42	3.46	5.93	1.43	1.80	0.98
Preparedness for full-time employment	2.92	3.90	5.83	1.00	0.90	1.33
Appropriateness of employment to education level	1.18	1.58	1.92	0.38	0.50	0.27
Work experience importance in acquiring first job	1.94	2.67	5.00	0.94	1.45	0.93
Employed full time	4.89	4.41	3.16	0.46	1.06	1.19
Qualification or formal training	3.16	2.57	2.48	0.70	1.11	0.97

Note: R = Related
U = Unrelated
N = None

Tukey's HSD test showed that graduates' who were in the '*Related*' group started on a significantly higher salary than those in the '*None*' group, ($p < .05$). Furthermore, Tukey's HSD test revealed that graduates' who were in the '*Unrelated*' group also started on a significantly higher salary than those in the '*None*' group, ($p < .05$). There were no statistically significant differences between the '*Related*' and '*Unrelated*' groups ($p = .848$). Hypothesis 7 was therefore partially supported as a statistically significant difference was found between the '*Related*' and '*None*' groups but not between the '*Related*' and '*Unrelated*' groups or between the '*Unrelated*' group and the '*None*' group.

Work Experience Influence on Satisfactory Job

Hypothesis 8 predicted that there would be a significant difference between the three groups on the reported usefulness of acquired work experience in facilitating individuals to find a satisfying job after graduation. Graduates in the

'Related' group would be more likely to have found the work experience they gained while at university useful in securing a satisfying job post graduation than those in the *'Unrelated'* group. An ANOVA was subsequently conducted on *'satisfying job'* however, the Levene's test (Coakes, Steed & Dzidic, 2006) revealed unequal variances between the three groups ($p = 0.000$). Subsequently, Welch's F statistic was utilised (Field, 2009) which revealed a statistically significant difference between the three groups on the *'satisfying job'* variable, ($F(2,127) = 34.93, p < .05$). The mean value for the *'Related'* group was 2.42 (SD = 1.43, the *'Unrelated'* group was 3.46 (SD = 1.80) and for the *'None'* group was 5.93 (SD = 0.98) (see Table 3 above).

The Games-Howell procedure was used for this hypothesis as it is the most powerful test to use when dealing with different variances and sample sizes (Field, 2009). The Games-Howell procedure revealed that graduates' who were in the *'Related'* group were more likely to have reported the work experience they gained was useful in securing a satisfying job post graduation than those in both the *'Unrelated'* and the *'None'* groups, ($p < .05$). Furthermore, the test showed that graduates' who were in the *'Unrelated'* group were more likely to be working in a *'satisfying job'* than those in the *'None'* group ($p < .05$). Hypothesis 8 was therefore supported as there was a significant difference between the *'Related'* group and both the *'Unrelated'* and the *'None'* groups.

Preparedness for Full-time Employment

Hypothesis 9 hypothesised that graduates in the *'Related'* group were more likely to feel that the work experience they gained while at university was useful in preparing them for full-time employment post graduation than those in the *'Unrelated'* group. An ANOVA was conducted on *'preparedness for full-time*

employment'. The Levene's test for homogeneity of variances displayed unequal variances between the three groups ($p = 0.000$) resulting in the use of Welch's F. Welch's F statistic (Field, 2009) exhibited a statistically significant difference between the three groups, ($F(2,126) = 58.77, p < .05$). The mean value for the '*Related*' group was 2.92 (SD = 1.00, the '*Unrelated*' group was 3.90 (SD = 0.90) and for the '*None*' group was 5.83 (SD = 1.33) (see Table 3, page 65).

The Games-Howell procedure was used once again as there were unequal variances and sample sizes (Field, 2009). The procedure showed that graduates' who were in the '*Related*' group were more likely to feel prepared for full-time employment post graduation than those in the '*None*' group ($p < .05$). Moreover, the test showed that graduates' who were in the '*Unrelated*' group were more likely to feel prepared for full-time employment post graduation than those in the '*None*' group ($p < .05$). Finally, there were no statistically significant differences between the '*Related*' and '*Unrelated*' groups ($p = .995$). Hypothesis 9 was therefore partially supported as a significant difference was found between the '*Related*' and the '*None*' group and between the '*Unrelated*' and '*None*' group, however there was no statistically significant difference between the '*Related*' and '*Unrelated*' groups.

Appropriateness of employment to education level

Hypothesis 10 hypothesised that graduates in the '*Related*' group would be more likely to feel that their current employment was appropriate to their level of education than those in the '*Unrelated*' group followed by graduates in the '*None*' group. An ANOVA was carried out on the '*appropriateness of employment to education level*' variable. The Levene's test was used to test for homogeneity of variances (Field, 2009) which displayed unequal variances between the three

groups ($p = 0.000$). Therefore, the Welch's F statistic was utilised (Field, 2009) which displayed a statistically significant difference between the three groups, ($F(2,73.66) = 53.31, p < .05$). The mean value for the '*Related*' group was 1.18 ($SD = 0.38$), the '*Unrelated*' group was 1.58 ($SD = .50$) and for the '*None*' group was 1.92 ($SD = 0.27$) (see Table 3, page 65).

The Games-Howell procedure was used due to differing population variances (Field, 2009) and showed that graduates' who were in the '*Related*' group were more likely to feel that their current employment is appropriate to their level of education than those in both the '*Unrelated*' and the '*None*' groups ($p < .05$). Furthermore, the procedure revealed that the graduates who were in the '*Unrelated*' group were more likely to feel that their current employment is appropriate to their level of education than those in the '*None*' group ($p < .05$). Hypothesis 10 was therefore supported as the '*Related*' group was found to be statistically significantly different from both the '*Unrelated*' and the '*None*' groups as well as between the '*Unrelated*' group and the '*None*' group.

Appropriate Employment Influence on Constructs

Hypothesis 11a predicted that graduates who felt their current employment was appropriate to their level of education (regardless of which group they fell into) would have higher *job satisfaction* ($\bar{x} = 5.28, SD = 1.45$). An ANOVA was carried out to compare '*job satisfaction*' with '*employment appropriate to education*'. The Levene's test was used to test for homogeneity of variances which revealed unequal variances between the '*None*', '*Unrelated*' and '*Related*' groups ($p = 0.000$). Therefore, the Welch's F statistic was utilised (Field, 2009) which displayed a statistically significant difference between the groups, ($F(2,17.10) = 5.60, p < .05$). The mean value for the '*employment appropriate to*

education' variable was 5.72 ($SD = 1.11$) (see Table 4, page 71). The Games-Howell procedure was used due to differing population variances (Field, 2009). The procedure showed that graduates' who felt their current employment was appropriate to their level of education had higher *job satisfaction* than those who did not feel their job was equivalent to their education ($p < .05$).

Hypothesis 11b proposed that graduates who felt their current employment was appropriate to their level of education would have higher *career satisfaction* ($\bar{x} = 4.77$, $SD = 1.47$). An ANOVA was carried out to compare the '*career satisfaction*' variable with the '*employment appropriate to education*' variable. The Levene's test for homogeneity of variances revealed unequal variances between the '*None*', '*Unrelated*' and '*Related*' groups ($p = 0.002$). The Welch's F statistic was subsequently utilised (Field, 2009) which displayed a statistically significant difference between the groups, ($F(2,16.03) = 6.43$, $p < .05$). The mean value for the '*employment appropriate to education*' was 5.21 ($SD = 1.13$) (see Table 4, page 71). Therefore, the Games-Howell procedure demonstrated that graduates' who felt their current employment was appropriate to their level of education had higher *career satisfaction* than those who did not feel their job was equivalent to their education ($p < .05$).

Hypothesis 11c proposed that graduates who felt their current employment was appropriate to their level of education would have higher *life satisfaction* ($\bar{x} = 4.62$, $SD = 1.39$). The results from the ANOVA comparing the '*life satisfaction*' variable with the '*employment appropriate to education*' variable revealed a statistically significant difference between the groups, ($F(2,127) = 3.235$, $p < .05$). The mean value for the '*employment appropriate to education*' was 4.90 ($SD = 1.32$) (see Table 4, page 71). Tukey's HSD *post-hoc* test was used as there were

equal variances and sample sizes between the 'None', 'Unrelated' and 'Related' groups (Field, 2009). Tukey's test showed that graduates' who felt their current employment was appropriate to their level of education had higher *life satisfaction* than those who did not feel their job was equivalent to their education ($p < .05$).

Hypothesis 11d proposed that graduates who felt their current employment was appropriate to their level of education would have higher *affective organisational commitment* ($\bar{x} = 3.93$, $SD = 1.42$). An ANOVA was conducted to compare the 'affective organisational commitment' variable with the 'employment appropriate to education' variable. The Levene's test for homogeneity of variances revealed unequal variances between the 'None', 'Unrelated' and 'Related' groups ($p = 0.012$). Welch's F demonstrated a statistically significant difference between the three groups, ($F(2,26.53) = 3.45$, $p < .05$). The mean value for 'employment appropriate to education' was 4.27 ($SD = 1.15$) (see Table 4 below). The Games-Howell procedure demonstrated that graduates' who felt their current employment was appropriate to their level of education had higher *affective organisational commitment* than those who did not feel their job was equivalent to their education ($p < .05$).

Finally, hypothesis 11e proposed that graduates who felt their current employment was appropriate to their level of education would have higher *person organisation fit* ($\bar{x} = 4.97$, $SD = 1.51$). An ANOVA was conducted to compare the *person organisation fit* variable which revealed a statistically significant difference between the 'None', 'Unrelated' and 'Related' groups, ($F(2,127) = 3.394$, $p < .05$). The mean value for the 'employment appropriate to education' was 5.33 ($SD = 1.29$) (see Table 4 below). Tukey's HSD *post-hoc* test showed that graduates' who felt their current employment was appropriate to their level of

education had higher *person organisation fit* than those who did not feel their job was equivalent to their education level ($p < .05$).

In summary, hypothesis 11a was supported as a difference was found between individuals on '*employment appropriateness*' and '*job satisfaction*'. Hypothesis 11b was supported as a difference was found between individuals on '*career satisfaction*' and '*employment appropriateness*'. Hypothesis 11c was also supported a difference was found between individuals on '*employment appropriateness*' and '*life satisfaction*'. Hypothesis 11d was supported as a difference was found between individuals on '*affective organisational commitment*' and the '*employment appropriateness*'. Finally, hypothesis 11e was supported as a difference was found between individuals on '*employment appropriateness*' and '*person organisation fit*'.

Table 4 – Descriptive Statistics of Appropriate Employment Influence

Description	Mean	Standard Deviation
Job Satisfaction	1.45	5.28
Career Satisfaction	1.47	4.77
Life Satisfaction	1.39	4.62
Affective Organisational Commitment	1.42	3.93
Person Organisation Fit	1.51	4.97

Work Experience Importance in Acquiring First Job

Hypothesis 12 hypothesised that graduates in the '*Related*' group would be more likely to feel that the work experience they gained while studying was an important factor in successfully acquiring their first job post graduation than those in the '*Unrelated*' group. An ANOVA was conducted on the '*work experience importance in acquiring first job*' variable. The Levene's test for homogeneity of

variances revealed unequal variances between the three groups ($p = 0.000$). Therefore, Welch's F statistic was utilised (Field, 2009) and exhibited a statistically significant difference between the three groups, ($F(2,127) = 107.14$, $p < .05$). The mean value for the '*Related*' group was 1.94 (SD = 0.94, the '*Unrelated*' group was 2.67 (SD = 1.45) and for the '*None*' group was 5.00 (SD = 0.93) (see Table 3, page 65).

The Games-Howell procedure showed that graduates' who were in the '*Related*' group were more likely to feel that the work experience they gained while studying was an important factor in successfully acquiring their first job than both those in the '*Unrelated*' and '*None*' groups ($p < .05$). Furthermore, the test showed that graduates' who were in the '*Unrelated*' group were more likely to feel that the work experience they gained while studying was an important factor in successfully acquiring their first job than those '*None*' group ($p < .05$). Hypothesis 12 was therefore supported as a significant difference was established between both the '*Related*' and the '*None*' group and between the '*Related*' and the '*Unrelated*' group as well as between the '*Unrelated*' and the '*None*' group.

Employed Full Time

Hypothesis 13 predicted that graduates in the '*Related*' group would be more likely to be employed full time than those in the '*Unrelated*' group followed by graduates in the '*None*' group. An ANOVA was conducted on the '*employed*' variable. The Levene's test was used which showed unequal variances between the three groups ($p = 0.000$). Welch's F statistic exhibited a statistically significant difference between the three groups, ($F(2,60.57) = 36.74$, $p < .05$). The mean value for the '*Related*' group was 4.89 (SD = 0.46, the '*Unrelated*' group was 4.41 (SD = 1.06) and for the '*None*' group was 3.16 (SD = 1.19) (see Table 3).

The Games-Howell procedure revealed that graduates' who were in the 'Related' group were more likely to be employed full time than both those in the 'Unrelated' and 'None' groups ($p < .05$). Furthermore, the test showed that graduates' who were in the 'Unrelated' group were more likely to be employed full time than those in the 'None' group ($p < .05$). Hypothesis 13 was therefore supported as a statistically significant difference was found between the 'Related' and 'None' groups as well as between the 'Related' and the 'Unrelated' groups and the 'Unrelated' and 'None' groups.

Qualification or Formal Training

Hypothesis 14 proposed that graduates who were in the 'Related' group would be more likely to have a job requiring a qualification or formal training than those in the 'Unrelated' group followed by graduates in the 'None' group. An ANOVA was carried out on the 'qualification' variable. The Levene's test revealed unequal variances between the three groups ($p = 0.000$). Welch's F statistic displayed a statistically significant difference between the groups, ($F(2,62.47) = 7.81, p < .05$). The mean value for the 'Related' group was 3.16 (SD = 0.70, the 'Unrelated' group was 2.57 (SD = 1.11) and for the 'None' group was 2.48 (SD = 0.97) (see Table 3, page 65).

The Games-Howell procedure revealed that graduates' who were in the 'Related' group were more likely to have a job requiring a qualification or formal training than those in both the 'Unrelated' and 'None' groups ($p < .05$). Finally, there was no statistically significant differences between the 'Unrelated' and 'None' groups ($p = .920$). Hypothesis 14 was partially supported due to the statistically significant difference found between the 'Related' group and the

'None' group as well as between the 'Related' and the 'Unrelated' groups. However, no significant difference was found between the 'Unrelated' and the 'None' groups.

Summary

This chapter provides the results of this study which suggest that working while completing a university degree does have certain benefits for a recent university graduate entering the employment market when compared to a recent graduate with unrelated or no work experience. The results indicate that graduates who had work experience related to their degree when they graduated were more likely to have felt prepared for full-time employment post graduation, applied for a fewer number of jobs, and started on a higher salary after entering the employment market than those who had no work experience at all. Graduates who had related work experience were more likely to have felt that their current employment was appropriate to their level of education, more likely to report that the work experience they gained was useful in enabling them to find a satisfying job post graduation, more likely to be employed full time, more likely to have a job requiring some form of qualification or formal training and more likely to have felt that the work experience they gained while studying was an important factor in successfully acquiring their first job, than both those graduates who had unrelated work experience or no work experience at all. These results and their implications will be discussed further in the next chapter alongside the strengths and limitations of this research, directions for future research and a conclusion of the study.

Chapter Four – Discussion:

The principal objective of this study was to investigate the perceived impact of work experience during university study on subsequent career outcomes and experiences for recent university graduates within New Zealand. The study aimed to ascertain whether employment differences exist between recent graduates who have had differing types and levels of work experience while completing their university studies. Specifically, the three types of graduates who were looked at were those who had no work experience at all while studying, those who had work experience unrelated to their degree and those who gained work experience which was related to what they were studying at university. The type of work experience the graduate had gained determined whether the individual was assigned to the '*None*', '*Unrelated*' or '*Related*' group. These three groups were then compared on five constructs: job satisfaction, career satisfaction, life satisfaction, person organisation fit and affective organisational commitment, as well as nine employment related variables such as starting salary, preparedness for full time work and the number of jobs the graduate applied for.

Participants were divided into the '*None*', '*Unrelated*' or '*Related*' group as Blasko, et al., (2002) found that work experience related to field of study had a particularly positive impact on employment outcomes for recent graduates. Therefore, it was deemed to be important to group those individuals who had work experience related to their qualification together, those who had work experience unrelated to their qualification together and those who had no work experience at all together. The study aimed to highlight any differences that were found between the three groups for existing and future working and non-working

students to demonstrate the possible short and longer term advantages of combining full time study with paid, part-time employment.

This chapter will discuss the main findings of the study, the practical implications of these findings, the limitations of the research, followed by suggestions for areas of development for future research and finally a conclusion will summarise the study and its findings.

Main findings

A previous research study conducted by Blasko, et al., (2002) indicated work experience during university education, and in particular that related to study, can have a positive effect on many aspects of employment for university graduates post-graduation. The results of the present study echo these findings, as they suggest that working while completing a university degree does have certain benefits for a recent graduate entering the employment market when compared to a recent graduate with unrelated or no work experience. The results presented in this study provide new evidence in an area lacking in research and becoming increasingly important as rising numbers of young individuals in New Zealand are gaining university qualifications (Ministry of Education, 2010).

Five out of fourteen hypotheses (35.71%) were fully supported, as significant differences were discovered between the '*Related*' group and the '*Unrelated*' group, the '*Unrelated*' group and the '*None*' group, and the '*Related*' group and the '*None*' group. Four out of fourteen hypotheses (28.57%) were partially supported. These hypotheses were partially supported as significant differences were only found between some of the groups, usually between the '*Related*' group and the '*None*' group. The remaining five hypotheses were

unsupported as no significant differences were found between any of the three groups. There was a positive correlation between all five constructs (0.40 – 0.76) and there were no correlations that reached the level of overlapping ($r = 0.80$, Field, 2009) demonstrating that multicollinearity does not exist between these variables. This is promising for the present study as they demonstrate that common method bias was not an issue with this research. Common method bias occurs when correlations between variables are inflated because each variable is measured using the same method (Spector, 1994).

The results indicate that graduates who had work experience related to their degree when they graduated were more likely to have felt prepared for full-time employment post graduation, applied for a fewer number of jobs, and started on a higher salary after entering the employment market than those who had no work experience at all. This indicates that graduates who gain related work experience while studying have a significant advantage over those with no work experience when it comes to career outcome opportunities. Individuals in the '*Related*' group are likely to feel more prepared for employment than those in the '*Unrelated*' and '*None*' groups due to the individual's acquired work experience. Individuals with related work experience would have an awareness of the type of work they would be likely to be doing upon securing employment in their field.

Additionally, individuals with related and unrelated work experience would have knowledge about the work place, such as how to be punctual, how to manage one's time effectively, and how to interact with employers, supervisors and co-workers. Individuals with related work experience would have applied for fewer jobs as they would potentially be more confident in their abilities than those individuals in the '*Unrelated*' and '*None*' groups. This would potentially result in

them being more selective about the jobs they applied for, possibly choosing to only apply for higher level jobs that would utilise both their degree knowledge and work experience.

Graduates who had related work experience were more likely to have felt that their current employment was appropriate to their level of education and more likely to report that the work experience they gained was useful in enabling them to find a satisfying job post graduation than graduates who had unrelated work experience or no work experience at all. Graduates with related work experience were more likely to be employed full time, more likely to have a job requiring some form of qualification or formal training and more likely to have felt that the work experience they gained while studying was an important factor in successfully acquiring their first job than those in the '*Unrelated*' and '*None*' groups. This indicates that having the knowledge acquired from work experience related to one's degree is more advantageous for many career outcome opportunities than having only unrelated or no work experience. Individuals with related work experience can utilise their relevant work experience to both secure a job within their field of study as well as secure a higher level job. Their combined degree and work experience knowledge will be likely to be seen as benefits to employers, resulting in these individuals securing an appropriate, knowledge orientated and subsequently, satisfying job.

Interestingly, when examining the '*Related*' group and the '*Unrelated*' group, these career outcome advantages do not translate to monetary benefits, as no significant difference was found between these two groups on 'starting salary'. This could perhaps be attributed to the economy at the time of graduation, as the

participants in the present sample graduated in the middle of a worldwide recession.

Graduates who had work experience unrelated to their degree were more likely to have felt prepared for full-time employment and started on a higher salary than those who had no work experience at all. Compared to those with no experience, graduates who had work experience unrelated to their degree were more likely to have felt that their current employment was appropriate to their level of education and to report that the work experience they gained was useful in enabling them to find a satisfying job post graduation. These graduates were also more likely to be employed full time and more likely to have felt that the work experience they gained while studying was an important factor in successfully acquiring their first job than those in the '*None*' group. This indicates that employers recognise the individuals who have knowledge from their degree as well as practical work experience, even if it was unrelated to their field of study, realise their potential worth to the company and ultimately pay these individuals accordingly.

Finally, the results indicate that graduates who felt their current employment was appropriate to their level of education, regardless of the type of work experience they gained, were more likely to have higher job satisfaction, career satisfaction, life satisfaction, affective organisational commitment and person organisation fit than those who felt they were under or over qualified for their position. This is likely to be due to the fact that these individuals feel as though they have acquired a job that is at least partially utilising the knowledge they acquired from their degree. These individuals are likely to be satisfied with their jobs and their career because they are able to justify to themselves that the

time and money spent at university was not squandered. These feelings would flow into their lives, resulting in higher life satisfaction. Finally, these individuals are likely to feel committed towards their organisation as the organisation gave them a chance by providing them with an appropriate job post graduation.

Practical implications

Common sense may say that a graduate with work experience related to their degree would have more opportunities entering the employment market than a graduate with no work experience at all. There have also been numerous studies that focus on the various career experiences of recent university graduates once they have entered the labour market. However, of the many studies that were reviewed, only a handful of studies, Blasko, et al., (2002) and Tustin, et al., (2012) for example, focussed specifically on the impact of engaging in paid part-time employment while studying as well as the impacts, either positive or negative, on those students' future career outcomes. Subsequently, this research has many practical implications for future university students who enter university with the mindset that just completing their degree will get them a job once they graduate. This study has shown that, in fact, those students who did not work while at university have had fewer opportunities available to them once entering the labour market. This can be seen from those graduates who combined work and study and especially those students who secured some work experience related to their degree, as those graduates have applied for fewer jobs and have started on a higher salary than those without work experience. Therefore, the practical implications for future university graduates are far reaching, as students can see the potential benefits post graduation of combining work and study.

This study has shown that having work experience related to one's degree post graduation can be more beneficial to an individual than only having work experience unrelated to one's degree, as a significant difference was found between individuals in the '*Related*' group and individuals in the '*Unrelated*' groups in five out of fourteen hypotheses. Graduates in the '*Related*' group were more likely to see the work experience they gained while studying as influential in acquiring a satisfactory job post graduation and more likely to secure employment appropriate to their education level. They were also more likely to view the work experience they gained while studying as important in acquiring their first job post graduation and hold a job requiring a qualification or some type of formal training than both those in the '*Unrelated*' and '*None*' groups.

This is likely to be because graduates who gained work experience related to their degree are more likely to secure a job within their qualification field as employers can see that they have already acquired some work experience related to their field of study. These individuals will theoretically acquire jobs that are at a higher level or at least, appropriate to their level of education because of their combined work experience and degree knowledge. This would subsequently equate to the individuals viewing their job as 'satisfactory' as the participants are all educated individuals who are likely to be career driven and want to be able to use the knowledge they have gained by securing an appropriate job within their field of study.

This study has shown that having related work experience while searching for a job post graduation could alleviate some of the job searching stress. Individuals with related work experience are more likely to both secure a job that is appropriate to their educational level and secure a job requiring a qualification

or formal training. This has important practical implications for recent university graduates as it can be seen that they are more likely to secure a higher level job that is in their field of study if they acquire related work experience while attending university.

However, in three of the hypotheses, the number of jobs the graduate applied for, the starting salary and whether or not the individual felt prepared for full-time employment post graduation, there was not a significant difference between related and unrelated work experience. This indicates that, in most respects, an individual who has gained work experience related to their degree will be provided with more employment opportunities post graduation. Although there is no evidence that suggests that having work experience related to one's degree will result in the individual applying for fewer jobs, feeling prepared for work after graduating or that the experience will translate in to monetary benefits.

These findings can be largely attributed to the time period that the participants in this study graduated. All participants graduated within the last five years which has resulted in them graduating in harsh economic conditions where the economy is not thriving and jobs are difficult to secure. The economic conditions could explain both why no difference in starting salary was found and why there was no difference in the number of jobs graduates applied for. Participants with related work experience could have accepted a salary below what they would have and applied for many more jobs than they would have in times of economic prosperity to ensure that they did secure a job.

The impact of working part-time on a student's university grades or lecture attendance was not examined in this study, however there have been numerous studies (Broadbridge & Swanson, 2005; Curtis & Shani, 2002; Hunt,

Lincoln & Walker, 2004; Manthei, & Gilmore, 2005) that have investigated the lives of students who have combined working and studying while attending university. A review of the literature revealed results both for and against university students combining paid-part time work with study. Negative effects include the difficulty and inability to manage workloads, having less time for academic study, feeling overloaded, rushed assignments, tiredness, stress, lower grades than students not working, missing lectures and deadline dates as well as working long, unsociable hours for low pay (Curtis & Shani, 2002; Hunt, Lincoln & Walker, 2004; Leonard, 1995). Positive effects have also been cited, such as learning how to manage one's time effectively, how to multi-task and be punctual, how to interact with people in the workplace, especially customers and employers as well as enhanced self-esteem, confidence and social skills (Blasko, et al., 2002; Broadbridge & Swanson, 2006; Hakkinen, 2004 & Larsen & McGuigan, 2010).

Practical implications for working many hours while studying was explored in the present study to determine whether an optimal number of hours exist for students to work while studying. Nothing conclusive was discovered from these explorations, which can possibly be attributed to event timing. Event timing is a temporal effect which in this study may demonstrate that the number of hours worked while studying, a past event, may not be related to subsequent or present events such as an individual's starting salary, job satisfaction or affective organisational commitment. Based on a comprehensive literature review and personal experience the optimal number of hours for a university student to work while studying full time is somewhere between 10 and 14 hours per week. Working within these hours would indicate that the individual was earning

enough to live on while accumulating some practical work experience although not working excessively so as to interfere with the individual's university studies.

Students are increasingly viewing education and universities as the gateway to securing a good job, which means practical implications exist for universities as institutions continually have to adapt to meet students' growing expectations. Work placement papers are papers that enable students to undertake work placement in an area related to their major as part of their degree, students work in a chosen field for a period of time in order to gain valuable work experience and learn from experts in their chosen field (The University of Waikato, 2013). Traditionally these types of papers have only been available to students doing degrees such as teaching or medicine, however they are now offered across a wide range of study areas such as engineering, arts and social sciences, law, science, social work, computing and mathematical sciences, Maori and Pacific development and writing studies (The University of Waikato, 2013). Work placement papers are one way that universities have begun to adapt to students' expectations, as they help facilitate students' employment possibilities post graduation.

Strengths

The major strength of this study is that it appears to be one of the few studies to focus specifically on the perceived impact of engaging in paid part-time employment while studying as well as the impacts, either positive or negative, on those students' future career outcomes. There have been very few research studies conducted in this area. Examples are the Graduate Longitudinal Study of New Zealand (Tustin, et al., 2012) in New Zealand and one other United Kingdom

study by Blasko, et al., (2002). Previous research has largely focussed on the positive and negative effects of combining paid part-time employment with study and the impact that combining these two roles can have on university aspects such as academic grades and lecture attendance (Curtis & Williams, 2002; Ehrenberg & Sherman, 1987; Hakkinen, 2004; Holton, 2001; Manthei & Gilmore, 2005 and Watts & Pickering, 2000). This research has subsequently addressed and contributed to gaps in the literature, and added to our understanding of the potential importance for university students to combine paid part-time work with university studies.

A further strength of this research is the extension of the research beyond American and British societies, by examining a sample of New Zealand students. One New Zealand article was found that investigated the effects of combining part-time employment with study and the impact that these two roles could have on university grades and lecture attendance (Manthei & Gilmore, 2005). Additionally, the GLSNZ examined a New Zealand sample of students who engaged in paid part-time employment while studying and the impacts on those students' future career outcomes (Tustin, et al., 2012).

Limitations

The study was subject to a number of limitations. The first limitation was the reliance on self-report measures used to assess all of the variables. The use of self-report data is based on the assumption that the best way to learn about an individual is to ask them directly (Breakwell, Hammond, Fife-Schaw & Smith, 2006). However, individuals' self-perceptions can be inaccurate or subject to response biases, which may produce erroneous results (Breakwell, et al., 2006)

and lead to common method bias. Nevertheless, these response biases are typical of all self-report questionnaires and are relatively common in organisational psychology research due to self-reporting often being the only viable method available to researchers for measuring such variables as affective organisational commitment and career satisfaction (Spector, 1994).

Recruiting participants for the present study posed some challenges as data collection was limited to various forms of online media due to the difficulty in locating recent university graduates. A number of alumni organisations declined to take part in the research. Eight organisations were approached however only four agreed to take part in the study, limiting the possible sample size considerably and restricting the present research quite significantly. A larger response rate and sample size may have strengthened the validity of the study and increased the generalisability of the results.

The original aim of the research was to look at the following five groups of graduates, the '*None*' group, '*Low Unrelated*', '*High Unrelated*', '*Low Related*', and the '*High Related*' group (see page 14). However, due to very small sample sizes in the '*Low Unrelated*' group and the '*Low Related*' group the five groups had to be combined to form three groups, the '*None*' group (graduates with no work experience), the '*Unrelated*' group (graduates with work experience unrelated to their degree) and the '*Related*' group (graduates with work experience related to their degree). The restructuring of the original groups resulted in the original hypotheses being reformulated to predict the relationships between the new groups. Therefore the lack of participants significantly restricted the present study's original aims, hypotheses and potential findings as no investigation into the optimal number of hours of work could be done nor could

the differences between the level of related or unrelated work experience on career outcomes be investigated to the extent that the researcher had intended.

A final limitation was the cross-sectional nature of the study. As data were only collected at one point in time, the longitudinal relationship between student work experience and graduate career outcomes could not be examined.

Future research

There are many potential directions for future research that were identified throughout the course of this study. This study classified all graduates into three broad groups, graduates with no work experience, unrelated experience and graduates with work experience related to their degree. Controlling for factors such as field of study or type of degree as Tustin, et al., (2012) did in the GLSNZ study, would aid in accounting for pre-existing differences between the wide range of degrees that students undertake. This would help to eliminate differences related to degree type and ensure the differences were due solely to the type of work experience gained. Furthermore, controlling for degree type could potentially provide valuable information about what areas of study provide the best earning potential or the most employment opportunities, either while studying or after graduation.

An additional suggestion for future researchers is to conduct a longitudinal rather than cross-sectional study, as Tustin et al., (2012) are doing with the GLSNZ study. This would mean the relationship between student work experience and graduate career outcomes could be examined long term. An optimal period to study the participants would be three years post graduation (Tustin, et al., 2012). Three years is a sufficient time for those graduates with no

work experience or only unrelated work experience to effectively ‘catch up’ with those graduates who had work experience related to their degree when they graduated. Three years would subsequently be an optimal time period to examine the continued influence that work experience could have on areas such as wage raises and career progression.

Future research could benefit from using a more direct approach to gathering data, perhaps by tracking a group of students from a short time before graduation to three years after graduation as Tustin, et al., (2012) are doing with the GLSNZ study. This would mean that graduates were more readily comparable as they all graduated within a very similar time period. Participants could then record how many jobs they applied for, in or out of their field, how many interviews they received, the exact salary they started on and the number of wage raises or promotions they received. The researcher could then gain a more accurate account of the graduate’s job searching process instead of asking the participants to retrospectively recount these actions and events. This would further allow the researcher to periodically track changes in the participant’s satisfaction levels by the type of work experience they gained while studying at university.

Finally, interviewing several employers of various small or large businesses across New Zealand could provide an alternative explanation of the value of combining part-time work experience with study and the impact that this may have on their employment decisions. The employer’s perspective could aid in discovering exactly what employers look for when hiring university graduates, how students who have no work experience are ranked in comparison to those who do and the extent that these differences could impact unsuccessful applicants.

Conclusions

The present study investigated the extent to which early or concurrent work experiences of recent university graduates contributed to subsequent career outcomes and experiences. The major objective of the research was to discover whether students who gained work experience related to their qualification differed from students who gained unrelated or no work experience while studying at university. Very few research studies have been conducted on student work experience and graduate career outcomes. Despite numerous studies that focus on the various career experiences of recent university graduates, only a handful of studies (Blasko, et al., in 2002, Tustin, et al., 2012) focussed specifically on the impact of engaging in paid part-time employment while studying as well as the impacts, either positive or negative, on those students' future career outcomes.

The three groups of graduates '*None*' (no work experience while studying), '*Unrelated*' (unrelated work experience while studying) and '*Related*' (related work experience while studying) were compared on five constructs (job satisfaction, career satisfaction, life satisfaction, person organisation fit and affective organisational commitment). The groups were also compared on nine employment related variables such as starting salary, preparedness for full time employment, number of jobs applied for, and appropriateness of employment to their level of education.

The study found interesting results for recent university graduates and the perceived impact that work experience can have on subsequent career outcomes, revealing numerous significant differences between the three groups, thereby supporting the research rationale. Perhaps the most notable discovery was that

graduates who had related work experience were more likely to have applied for fewer jobs before securing a 'satisfying' one post graduation and started on a higher salary after entering the employment market than those who had no work experience at all. This study has also shown that having related work experience post graduation can be advantageous for recent university graduates as a significant difference was found between the '*Related*' and '*Unrelated*' groups in five out of fourteen hypotheses. This indicated that individuals who gained work experience related to their degree would generally have more employment opportunities post graduation, although there is no evidence to suggest that having related work experience will translate in to monetary benefits. This study has shown that recent university graduates with related work experience are more likely to both secure a job that is appropriate to their educational level and secure a job requiring a qualification or formal training.

This research has contributed to the few studies conducted in this area, to the understanding of the importance for university students to combine university studies with part-time work as well as how valuable it can be for students to gain work experience related to those studies. This study has demonstrated that it is important for students to be aware that their employment opportunities after graduating could be severely hindered by not taking part in some form of part-time employment while completing their studies. In conclusion, the findings of the present study yielded some very interesting, important and practical results for both existing and future university students. Future students will be able to utilise the findings of this study to facilitate their decisions on whether or not to combine study with part-time employment resulting in this study being a valuable resource for students and a noteworthy foundation for future researchers to expand on.

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Appendices:

Appendix A – The short description

Masters Thesis data collection

Hi, I am undertaking a Masters thesis in the area of Applied Organisational Psychology, looking at whether early or concurrent work experiences of recent graduates effects subsequent career outcomes. If you are a recent University graduate, please click on the link below to see whether you meet the criteria. To thank you for your time, I am offering an incentive to participate: a random prize draw for a mystery night away for two people, worth \$100! Please click on the following link to go to the survey:

https://qasiatrial.asia.qualtrics.com/SE/?SID=SV_aa8z50Rue975ctm

Appendix B – The information page

THE UNIVERSITY OF WAIKATO MASTERS THESIS RESEARCH

By: Alicia Tutbury

This survey is being completed as part of my Masters Thesis Research in Applied Organisational Psychology at the University of Waikato. The purpose of this questionnaire is to see how early or concurrent work and life experiences of recent graduates can influence or impact subsequent career experiences.

The questionnaire will take approximately **20 minutes** to complete and is **completely anonymous**. All results are confidential and will only be used for the purposes of this research. No individual candidate can or will be identified and **participation is voluntary**. You may choose to decline to answer any particular question in the questionnaire.

I am available to answer any further questions that you may have about the research throughout your participation. If you require more information about this survey and your involvement you can email me on aliciatutbury@yahoo.co.nz or phone me on 027 710 9228 or 07 858 4546. Additionally, you may direct any questions or concerns you may have to my primary supervisor, Dr Donald Cable, email: dcable@waikato.ac.nz, phone: 07 838 4466 ext. 8296

This research project has been approved by the Research Ethics Committee of the School of Psychology. Any questions or complaints about the ethical conduct of this research may be sent to Dr Nicola Starkey, email: nstarkey@waikato.ac.nz, phone: 07 838 4466 ext. 6472

If you wish to receive a summary of the findings from this research please send a blank email to mastersfindings@yahoo.co.nz and a copy of the findings will be forwarded to you when the results become available. Each participating Alumni Organisation will automatically receive a copy of the results, when they become available, unless the organisation specifies otherwise.

As a thank you for participating in this survey you may choose to go into the draw to win a mystery night away for two people. If you would like to go into the draw please send a blank email to mastersfindings@yahoo.co.nz and insert **‘participation incentive’** into the subject line. All the participants who wish to go into the draw will be put into a randomization program and the winner will be notified by email once all the data has been collected.

Thank you in advance for your participation! ☺

Appendix C – Eligibility criteria and questionnaire instructions

Eligibility Criteria:

To ensure variables and consequently data are not confounded; there are some necessary eligibility criteria for this survey: Subsequently, please only participate in this survey if....

- a) You went *direct* from High School to University without taking a break to work or travel
- b) While you completed your qualification at University, you were enrolled in a *full-time* university program for the *entirety* of your tertiary education. If your qualification had a placement or internship incorporated into the qualification, you were considered to be enrolled *full-time* while completing the internship/placement (unless the internship/placement was completed during the summer vacation period)
- c) You graduated in the year **2007 or later** from your highest qualification

Questionnaire Instructions:

Some questions require open answers for which you may write as much or as little as you feel is necessary to adequately answer the question.

Important: There are some questions in this survey that only need to be answered if specific questions are answered in a certain way. Therefore, you may find that when you answer a question you will be directed to the next section. If this occurs, please continue on and answer the next question available for you to answer.

Appendix D – The questionnaire

All of the following questions are rated on the same scale:

Please rate the statements below from 1-7, where
1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = agree, 6 = agree and 7 = strongly agree.

Your level of satisfaction with your current job:

1. All in all, I am satisfied with my job
2. In general, I don't like my job (R.)
3. In general, I like working here

Your current level of life satisfaction:

4. In most ways my life is close to my ideal
5. The conditions of my life are excellent
6. I am satisfied with my life
7. So far I have attained the important things I want in life
8. If I could live my life over, I would change almost nothing

Your current level of satisfaction with your career:

9. I am satisfied with the success I have achieved in my career
10. I am satisfied with the progress I have made toward meeting my overall career goals
11. I am satisfied with the progress I have made toward meeting my goals for income
12. I am satisfied with the progress I have made toward meeting my goals for advancement
13. I am satisfied with the progress I have made toward meeting my goals for the development of new skills

Your level of 'fit' with your current organisation:

14. My values "match" or "fit" my organisation and the current employees in my organisation
15. My values "match" those of my current co-workers in my organisation
16. The values and "personality" of my organisation reflect my own values and personality

Your level of commitment to your current organisation

- 17. I would be very happy to spend the rest of my career with my current organisation
- 18. I really feel as if my organisation's problems are my own
- 19. I do not feel like "part of the family" at my organisation (R.)
- 20. I do not feel "emotionally attached" to my organisation (R.)
- 21. My organisation has a great deal of personal meaning for me
- 22. I do not feel a strong sense of belonging to my organisation (R.)

University and employment history:

- 23. Please select your highest qualification:
 - a. Bachelors
 - b. Post Bachelors
- 24. How long ago did you graduate with your highest qualification?
 - a. Less than 6 months ago
 - b. 6 months – 1 year ago
 - c. 1 – 2 years ago
 - d. 2 – 3 years ago
 - e. 3 – 4 years ago
 - f. 4 – 5 years ago
- 25. How many years did it take you to complete your qualification(s)?
 - a. 3 years
 - b. 4 years
 - c. 5 years
 - d. 6 years
 - e. 7 years
 - f. 8 years
- 26. How useful was your *qualification* in preparing you for full-time employment?
 - a. Very useful
 - b. Somewhat useful
 - c. Useful
 - d. Neither useful nor useless
 - e. Useless
 - f. Somewhat useless
 - g. Very useless

27. How useful was your **qualification** in helping you find a satisfying job after graduation?
1. Very useful
 2. Somewhat useful
 3. Useful
 4. Neither useful nor useless
 5. Useless
 6. Somewhat useless
 7. Very useless
28. While you were enrolled in a formal tertiary education program, what kind of financial assistance (other than income you personally earned) did you receive? Please select all that apply:
1. Student Loan
 2. Student Allowance
 3. Other, please specify: _____
29. Throughout the course of completing your University qualification, did you gain any work experience? (during term time or during the summer vacation period– include internships/placements)
1. No
 2. Yes
30. Was the majority of your work experience
- a. During term-time (studying and working) = A, B, T and C semesters as well as summer school (include internships/placements)
 - b. During summer vacation (working but not studying) = November-February (include internships/placements)
 - c. Both term-time and summer vacation employment (include internships/placements)

*Please only answer questions 31 (a) and (b) below if you worked **during term time** (studying and working) = A, B, T and C semesters as well as summer school (include internships/placements)*

31. a) On average, how many hours per week did you work during **term time** (March-October) in **each year** of your qualification?
- b) What **percent** of this work was related to your qualification? (include internships/placements)

Yr	a) hours per week during <i>term time</i>							b) % of work related to your qualification					
1	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
2	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
3	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
4	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
5	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
6	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
7	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
8	None	1-5	6-10	11-15	16-20	20+	N/A	0-20	20-40	40-60	60-80	80-100	N/A

32. What was your primary motivation for entering into and/or remaining in **paid employment during term time**?

1. Economic reasons
2. Other reasons

*Please only answer questions 33 (a) and (b) below if you worked **during summer vacation** (working but not studying) = November-February (include internships/placements)*

33. a) On average, how many hours per week did you work during the **summer vacation** period (November-February) in **each year** of your qualification?

b) What **percent** of this work was related to your qualification? (include internships/placements)

Yr	a) hours per week during <i>summer vacation</i>							b) % of work related to your qualification					
1	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
2	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
3	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
4	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
5	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
6	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
7	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A
8	None	10-19	20-29	30-39	40-49	50+	N/A	0-20	20-40	40-60	60-80	80-100	N/A

34. If you were in paid employment while studying, or completed a qualification with an inbuilt placement or internship, was the practical/work experience you acquired during your study an important factor to the employer(s) in your job searching process/and/or for recruitment into your first job?
1. Yes, very important
 2. Yes, important
 3. Neither important nor not-important
 4. No, not really important
 5. No, not important
35. Did you use contacts established through your part-time employment during the course of looking for your first job after graduation?
1. Yes, to a large extent
 2. Yes, somewhat
 3. Neither yes nor no
 4. No, not really
 5. No, not at all
36. How useful was the **work experience** you gained during your University qualification (include internship/placement) in **preparing you** for full-time employment?
1. Very useful
 2. Somewhat useful
 3. Useful
 4. Neither useful nor useless
 5. Useless
 6. Somewhat useless
 7. Very useless
37. How useful was the **work experience** you gained during your University qualification (include internship/placement) in helping you find a **satisfying job** after graduation?
1. Very useful
 2. Somewhat useful
 3. Useful
 4. Neither useful nor useless
 5. Useless
 6. Somewhat useless
 7. Very useless

Current Employment:

38. Are you currently employed?
1. No, and not seeking work
 2. No, and seeking work
 3. Yes, part-time
 4. Yes, part-time and seeking additional work
 5. Yes, full-time
39. How many hours per week do you work in your primary job?
_____ hours per week
40. How long have you been employed by your current employer?
_____ years, _____ months
41. How long have you been employed in your current position?
_____ years, _____ months
42. While searching for your first job after graduation, approximately how many jobs did you apply for before being offered a position?
_____ jobs
43. Was the first position you were offered your desired job? In other words, did you take the first position you were offered?
1. Took first position offered
 2. Turned down first position offered and continued job searching
 3. Took first position offered and kept searching for an additional or alternative job
44. If you took the first position you were offered, why did you keep job searching?
1. The position you took was for part-time hours when you required full-time hours
 2. The position you took was a less-than desirable job
 3. Other, please specify: _____
 4. Not applicable
45. While searching for your current, primary job, did you have to move or relocate to secure or accept this job?
1. No
 2. Yes

46. Thinking about your primary job, what qualifications does a person need to do your job? (either formal training or work experience can count)

47. Do you feel that your current employment is appropriate to your level of education?

1. Yes

2. No, please specify why: _____

48. Please indicate your starting salary level from your first job after graduating/completing your qualification:

1. Less than NZ\$30,000

2. NZ\$30,000 - NZ\$40,000

3. NZ\$40,000 - NZ\$50,000

4. NZ\$50,000 - NZ\$60,000

5. NZ\$60,000 - NZ\$70,000

6. NZ\$70,000 - NZ\$80,000

7. NZ\$80,000 - NZ\$90,000

8. NZ\$100,000 +

49. Please indicate your current salary level:

1. Less than NZ\$30,000

2. NZ\$30,000 - NZ\$40,000

3. NZ\$40,000 - NZ\$50,000

4. NZ\$50,000 - NZ\$60,000

5. NZ\$60,000 - NZ\$70,000

6. NZ\$70,000 - NZ\$80,000

7. NZ\$80,000 - NZ\$90,000

8. NZ\$100,000 – NZ\$150,000

9. NZ\$150,000 +

Demographics:

50. What is your age? _____

51. Are you

1. Male

2. Female

52. If you are no longer living in New Zealand please provide the reason you left after graduating:

1. To get a better/higher paying job in your field

2. To go travelling

3. Other, please specify:

4. Not applicable

53. Which ethnic group(s) do you belong to? Please select the option(s) that apply to you.

1. New Zealand European
2. Maori
3. Pacific peoples
4. Asian
5. Other, please specify:

54. If there is anything else you would like to mention about the survey or the study that you feel is important, please write it below:

Thank you for your participation ☺

Appendix E – The thank you page

**Thank you very much for your time and effort in contributing to
my research!!**

Your input is very important for my research as well as contributing to the field of Organisational Psychology as a whole and I greatly appreciate the time you have taken to participate in my survey.

Therefore, as a thank you for your participation in my survey, you may choose to enter the draw to win a mystery night away for two people, worth \$100!

If you would like to go into the draw please send a blank email to mastersfindings@yahoo.co.nz and insert 'participation incentive' into the subject line. All the participants who wish to go into the draw will be put into a randomization program and the winner will be notified by email once all the data has been collected.

If you wish to receive a summary of the findings from this research please send a blank email to mastersfindings@yahoo.co.nz and a copy of the findings will be forwarded to you when the results become available. Each participating Alumni Organisation will automatically receive a copy of the results, when they become available, unless the organisation specifies otherwise.

Thanks again for your time and effort!

Alicia

Appendix F – Research ethics approval

School of Psychology
The University of Waikato
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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

6 June 2012

Alicia Anne Tutbury
24B Helena Road
Hillcrest
Hamilton 3216

Dear Alicia

Ethics Approval Application – # 12:34

Title: Early or concurrent work experiences of recent graduates and subsequent career outcomes

Thank you for your ethics application which has been fully considered and approved by the Psychology Research and Ethics Committee.

Please note that approval is for three years. If this project has not been completed within three years from the date of this letter, you must request reapproval.

If any modifications are required to your application, e.g., nature, content, location, procedures or personnel these will need to be submitted to the Convenor of the Committee.

I wish you success with your research.

Yours sincerely

Prof. T. Mary Foster
pp Convenor
Psychology Research and Ethics Committee
School of Psychology
University of Waikato

Appendix G – Description of Items

Item	Scale
1. All in all, I am satisfied with my job	JS
2. In general, I don't like my job (r)	JS
3. In general, I like working here	JS
4. In most ways my life is close to my idea	LS
5. The conditions of my life are excellent	LS
6. I am satisfied with my life	LS
7. So far I have attained the important things I want in life	LS
8. If I could live my life over, I would change almost nothing	LS
9. I am satisfied with the success I have achieved in my career	CS
10. I am satisfied with the progress I have made toward meeting my overall career goals	CS
11. I am satisfied with the progress I have made toward meeting my goals for income	CS
12. I am satisfied with the progress I have made toward meeting my goals for advancement	CS
13. I am satisfied with the progress I have made toward meeting my goals for the development of new skills	CS
14. My values "match" or "fit" my organisation and the current employees in my organisation	POF
15. My values "match" those of my current co-workers in my organisation	POF
16. The values and "personality" of my organisation reflect my own values and personality	POF
17. I would be very happy to spend the rest of my career with my current organisation	AOC
18. I really feel as if my organisation's problems are my own	AOC
19. I do not feel like "part of the family" at my organisation (r)	AOC
20. I do not feel "emotionally attached" to my organisation (r)	AOC
21. My organisation has a great deal of personal meaning for me	AOC
22. I do not feel a strong sense of belonging to my organisation(r)	AOC

Note: (r) = Item reverse coded

JS = Job Satisfaction

CS = Career Satisfaction

LS = Life Satisfaction

POF = Person organisation fit

AOC = Affective organisational commitment

Appendix H – Factor Analyses

Table H1. Pattern matrix of all five factors

Pattern Matrix ^a					
			Factor		
	1	2	3	4	5
Recode JobS2	.524	-.050	-.242	.159	.138
JobS3	.448	-.124	-.236	.076	.215
JobS1	.444	-.173	-.352	.055	.126
LifeS3	.198	-.908	.017	-.155	.069
LifeS4	-.086	-.765	.048	.177	-.045
LifeS1	.017	-.656	-.164	.107	.140
LifeS5	-.156	-.615	-.347	-.115	.009
LifeS2	.166	-.609	.011	.090	.168
CareerS4	-.098	.017	-.884	.078	.095
CareerS5	-.054	-.061	-.766	-.019	.109
CareerS2	.128	-.138	-.719	.157	-.051
CareerS1	.229	-.130	-.692	.028	-.061
CareerS3	.074	.062	-.691	.014	.026
AOC5	.102	-.012	-.071	.785	.044
AOC2	-.080	-.072	.008	.733	-.016
Recode AOC4	.072	.150	-.066	.507	.334
AOC1	.237	-.042	-.154	.442	.043
POF3	-.016	-.065	-.069	.064	.852
Recode AOC3	.010	.045	.055	-.009	.698
POF2	.017	-.174	-.039	-.005	.689
POF1	-.021	-.029	-.247	.063	.675
Recode AOC6	.307	-.041	.003	.168	.379

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Figure H.1 – Scree plot of all five factors

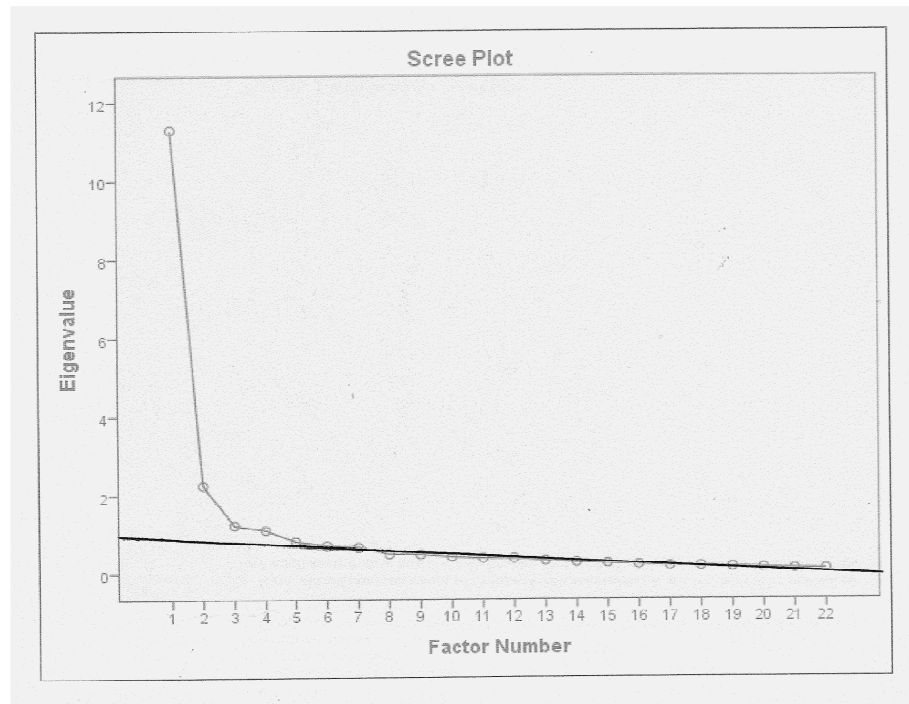


Table H.2 - Factor loadings of all five factors

Scale		Initial Eigenvalue	% Variance Explained	Factor #
Job Satisfaction		11.30	51.38	1
Life Satisfaction		2.24	10.20	2
Career Satisfaction		1.23	5.60	3
Affective Organisational Commitment		1.11	5.05	4
Person Organisation Fit		0.80	3.64	5

Figure H.2 – Job satisfaction scree plot

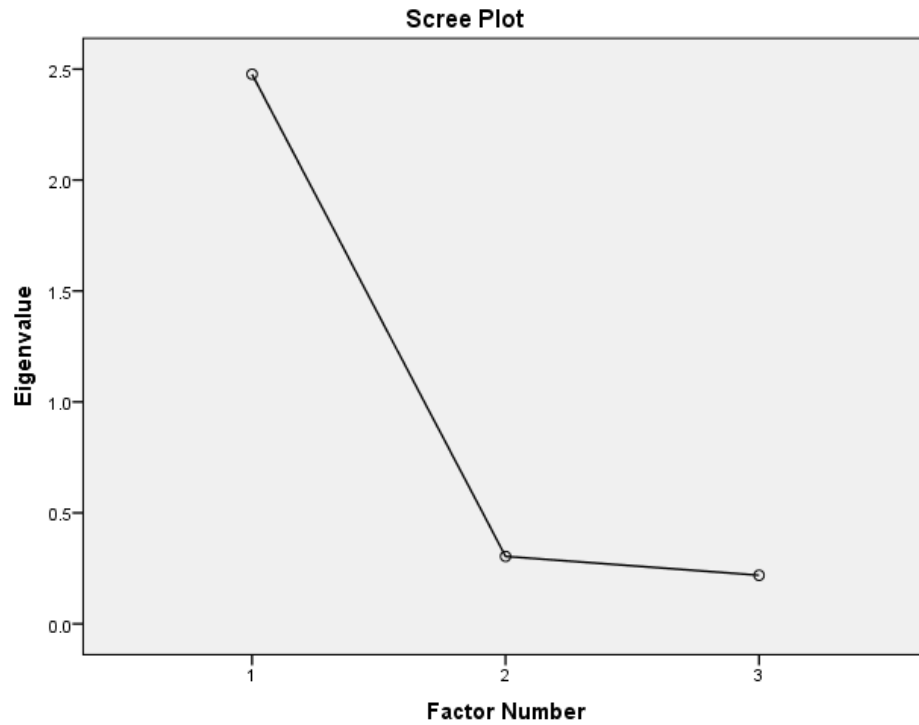


Table H.3 - Factor loadings of job satisfaction

Item #	Item	Factor 1
JobS2	In general, I don't like my job (r)	0.52
JobS3	In general, I like working here	0.44
JobS1	All in all, I am satisfied with my job	0.44
Eigenvalues		2.47
% Variance Explained		74.0
Alpha		0.89

Note: (r) = Item reverse coded

Figure H.3 - Career satisfaction scree Plot

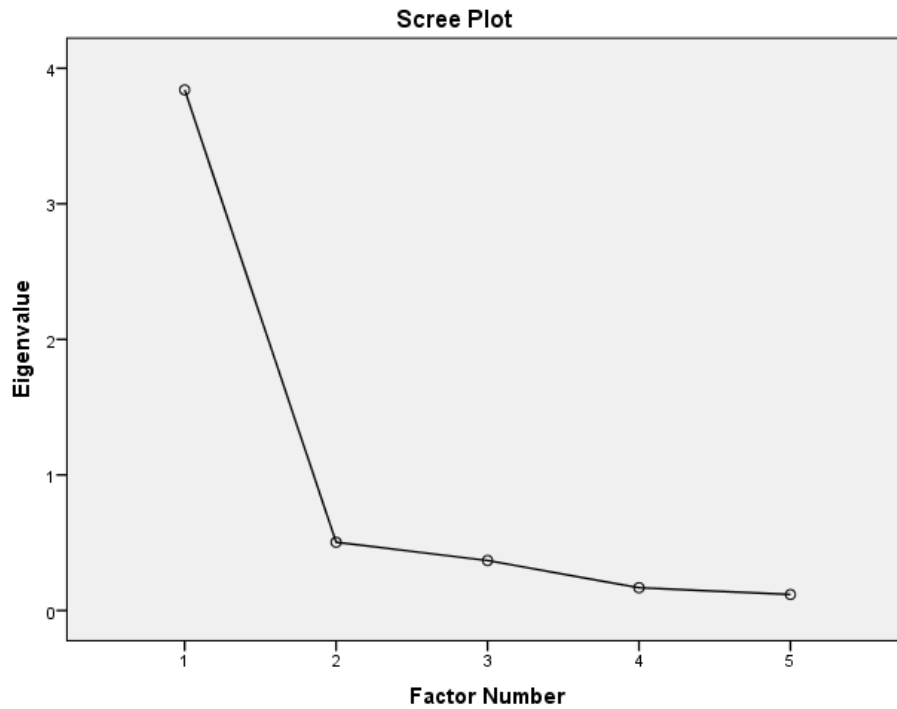


Table H.4 - Factor loadings of career satisfaction

Item #	Item	Factor 1
CareerS4	I am satisfied with the progress I have made toward meeting my goals for advancement	-0.88
CareerS5	I am satisfied with the progress I have made toward meeting my goals for the development of new skills	-0.76
CareerS2	I am satisfied with the progress I have made toward meeting my overall career goals	-0.71
CareerS1	All in all, I am satisfied with my job	-0.69
CareerS3	I am satisfied with the progress I have made toward meeting my goals for income	-0.69
Eigenvalues		3.84
% Variance Explained		72.50
Alpha		0.92

Figure H.4 - Life satisfaction scree plot

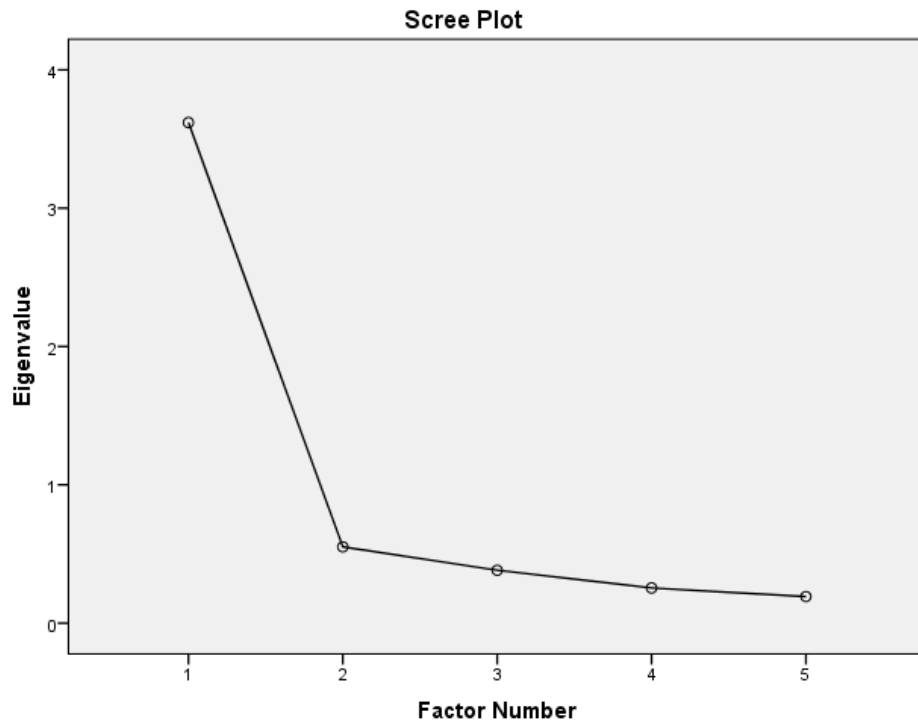


Table H.5 - Factor loadings of life satisfaction

Item #	Item	Factor 1
LifeS3	I am satisfied with my life	-0.90
LifeS4	So far I have attained the important things I want in life	-0.76
LifeS1	In most ways my life is close to my ideal	-0.65
LifeS5	If I could live my life over, I would change almost nothing	-0.61
LifeS2	The conditions of my life are excellent	-0.60
Eigenvalues		3.61
% Variance Explained		65.90
Alpha		0.90

Figure H.5 - Affective organisational commitment scree plot

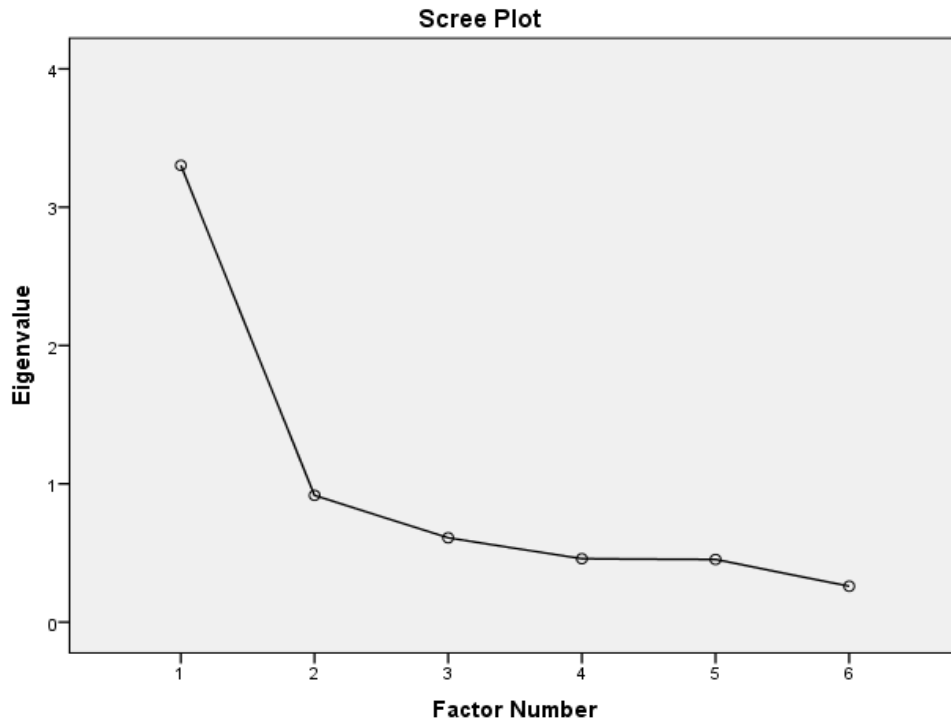


Table H.6 - Factor loadings of affective organisational commitment

Item #	Item	Factor 1	Factor 2
AOC5	My organization has a great deal of personal meaning for me	0.78	
AOC2	I really feel as if my organisation's problems are my own	0.73	
AOC4	I do not feel like "emotionally attached" to my organisation (r)	0.50	
AOC1	I would be very happy to spend the rest of my career with my current organisation	0.44	
AOC3	I do not feel like "part of the family" at my organisation (r)	-0.00	0.69
AOC6	I do not feel a strong sense of belonging to my organization (r)	0.16	0.37
Eigenvalues		2.63	
% Variance Explained		55.50	
Alpha		0.82	

Note: (r) = Item reverse coded

Figure H.6 - Person organisation fit scree plot

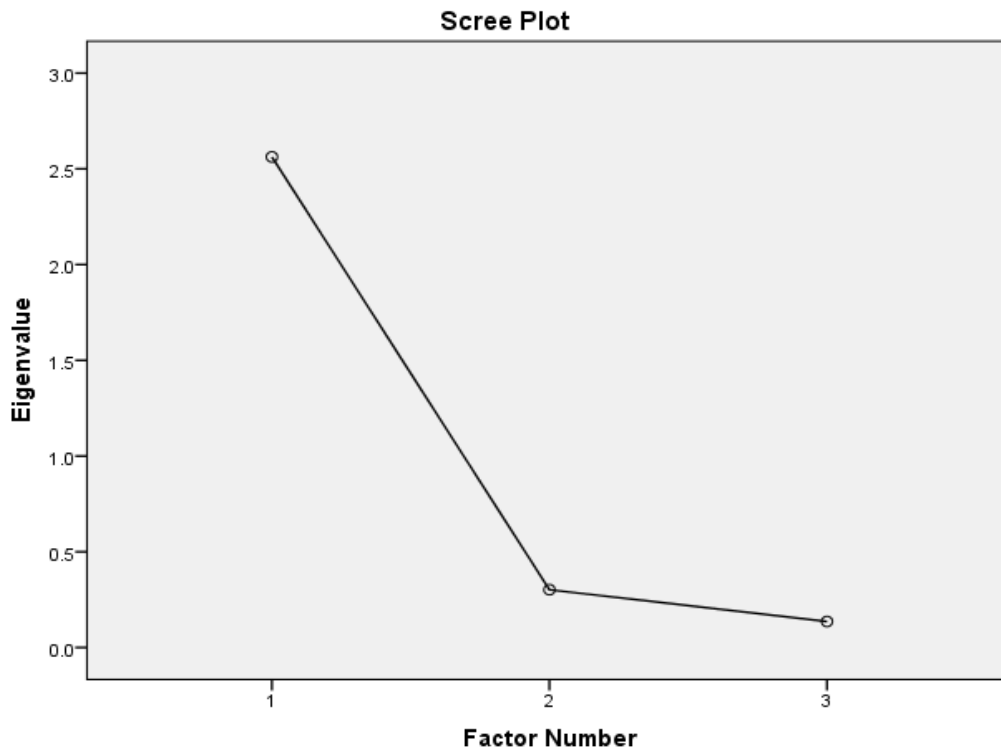


Table H.7 - Factor loadings of person organisation fit

Item #	Item	Factor 1
POF3	The values and “personality” of my organisation reflect my own values and personality	0.85
POF2	My values “match” those of my current co-workers in my organisation	0.68
POF1	My values “match” or “fit” my organisation and the current employees in my organisation	0.67
Eigenvalues		2.56
% Variance Explained		78.60
Alpha		0.91